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STEVE CRISAFULLI
Speaker of the House of Representatives

July 7, 2016

Ms. Carlotta Stauffer, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket No. 160021, 160061-EI, 160062-EI and 160088-EI

Dear Ms. Stauffer:

Please find enclosed for filing in the above referenced docket the Direct Testimony and Exhibits of **Jacob Pous.** This filing is being made via the Florida Public Service Commission's Web Based Electronic Filing portal.

If you have any questions or concerns; please do not hesitate to contact me. Thank you for your assistance in this matter.

Sincerely,

Charles J. Rehwinkel
Deputy Public Counsel

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for rate increase by Florida Power Company	Docket No. 160021-EI
In re: Petition for approval of 2016-2018 storm hardening plan, by Florida Power & Light Company.	Docket No. 160061-EI
In re: 2016 depreciation and dismantlement study by Florida Power & Light Company.	Docket No. 160062-EI
In re: Petition for limited proceeding to modify and continue incentive mechanism, by Florida Power & Light Company.	Docket No. 160088-EI
_____/	Filed: July 07, 2016

DIRECT TESTIMONY

OF

JACOB POUS

ON BEHALF OF THE CITIZENS OF THE STATE OF FLORIDA

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EXHIBITS

DIRECT TESTIMONY

OF

Jacob Pous

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 160021-EI, et al (consolidated)

SECTION I: STATEMENT OF QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jacob Pous. My business address is 1912 W Anderson Lane, Suite 202, Austin, Texas 78757.

Q. WHAT IS YOUR OCCUPATION?

A. I am a principal in the firm of Diversified Utility Consultants, Inc. ("DUCI"). A description of my qualifications appears as Exhibit__(JP-Appendix A).

Q. PLEASE DESCRIBE DIVERSIFIED UTILITY CONSULTANTS, INC.

A. DUCI is a consulting firm located in Austin, Texas. DUCI has an international client base. DUCI provides engineering, accounting, and financial services to clients. DUCI provides utility consulting services to municipal governments with utility systems, to end-users of utility services and to regulatory bodies such as state public service commissions. DUCI provides complete rate case analyses, expert testimony,

negotiation services and litigation support in electric, gas, telephone, water, and sewer utility matters.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN PUBLIC UTILITY PROCEEDINGS?

A. Yes. Exhibit___(JP-Appendix A) also includes a list of proceedings in which I have previously presented testimony. In addition, I have been involved in numerous utility rate proceedings that resulted in settlements before testimony was filed. In total, I have participated in well over 400 utility rate proceedings in the United States and Canada. I have testified on behalf of the staff of six different state regulatory commissions and one Canadian regulatory commission on subjects relating to appropriate depreciation rates, and been asked to speak to the National Association of Regulatory Utility Commissioners ("NARUC") on several occasions regarding the topic of depreciation.

Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?

A. I am a registered professional engineer. I am registered to practice as a Professional Engineer in the State of Texas.

Q. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?

A. Florida's Office of Public Counsel ("OPC") engaged me to address the depreciation study and the depreciation aspects of the revenue requirements request of Florida Power & Light Company ("FPL" or "the Company") pending before Florida Public

Service Commission (the "Commission" or "FPSC") in these consolidated proceedings.

SECTION II: OVERVIEW

Q. CAN YOU PROVIDE A QUICK OVERVIEW OF THE RELATIVE SIGNIFICANCE OF DEPRECIATION-RELATED MATTERS IN THE CONTEXT OF FPL'S REQUESTED INCREASE IN REVENUES?

A. Yes. In terms of revenue impacts, the subject of depreciation is extremely significant in this proceeding. In my testimony, I report the results of my account-by-account analysis of the depreciation study that FPL is sponsoring, the results of which are reflected in FPL's calculation of its revenue requirements. I identify numerous examples in which FPL's witness overstates depreciation expense, and refute FPL's proposed treatment on the basis of the inappropriate assumptions and rationales that he employed. My approach is a "from the bottom up" type of analysis, in which I review the details of individual accounts and build up the individual adjustments into a total dollar recommendation. In the aggregate, my adjustments amount to $533 million of reduced depreciation expense annually. Approximately $231 million of this annual amount is intended to return to current customers a *portion* of a massive reserve excess that is the result of FPL's having over collected depreciation expense over time; the balance relates to my adjustments to FPL's calculation of annual depreciation expense that the utility should recognize "going forward." When applied to FPL's proposed increase, the impact of my $533 million recommendation is to reduce FPL's revenue requirements dollar for dollar before consideration of depreciation expense recovered

through separate rate clauses and jurisdictional allocation. In other words, when FPL's overly aggressive depreciation practices and proposals, past and present, are modified to conform to available data and reasonable assumptions, the result is to offset a substantial portion of FPL's $1.6 billion rate increase request for 2017. (See FPL's Third Notice of Identified Adjustments Filed June 30, 2016). At first blush, the magnitude of my overall recommendation may be surprising. However, as I will show, the result is the sum of dozens of smaller individual adjustments, each of which is a "standalone" topic and each of which I will document, discuss, and support in detail in the course of my testimony.

Q. HOW HAVE YOU ORGANIZED YOUR TESTIMONY?

A. I will begin with an introductory background section, in which I will define and describe the basic nature and role of depreciation in the context of a regulated electric utility. Next, I will provide an "executive summary" of my analysis. I will then develop the issues that I have identified and my analysis of the appropriate disposition of those issues in detail.

A. General Background

Q. PLEASE BRIEFLY EXPLAIN THE CONCEPT OF DEPRECIATION AS IT APPLIES TO A REGULATED ELECTRIC UTILITY.

A. While the term "depreciation" is commonly used to describe a loss of value due to "wear and tear," it has a precise and specialized meaning as an accounting

concept. Depreciation refers to the recoupment of a capital investment, less net salvage, over the useful life of the asset to which the investment relates.

Q. CAN YOU ILLUSTRATE THE MEANING OF THE TERM?

A Yes. Perhaps the best way to explain the concept is to contrast an item that is depreciated with one that is not depreciated. As the example of an item that is not depreciated, let's use copier paper. Assume the utility purchases 1,000 reams of paper for $5,000, and consumes all of the paper within the month in which it was purchased. The utility therefore "expenses" the full $5,000 in the period of the purchase. Assume the utility spends $250,000 on copier paper annually. The annual total cost of copier paper is recorded as a portion of operations and maintenance expense, which is deducted from operating revenues to calculate net income for the year in which the paper was purchased. Recognizing the full cost of the paper purchased in the year is appropriate from a matching standpoint, because the paper was consumed completely in the period in which it was purchased. Moreover, because base rates are designed to recover operating costs and provide a return on investment, the annual cost of copier paper is embedded in the rates that the utility charges its customers, and $250,000 of overall revenues serves the purpose of recovering from customers the cost of copier paper consumed during the year.

Q. PLEASE CONTINUE.

A. Now, let's compare that situation with the example of an investment in copper conductor. Assume the conductor costs $100,000 to purchase and install, and the utility

expects to use it in the business for fifty years. At the end of fifty years the utility expects to sell the copper for $30,000 but also anticipates it will incur $10,000 of cost in removing it from the system. This means that its net depreciable investment will be $80,000 ($100,000-$30,000+$10,000). To recognize the full $80,000 in a single year would be to distort the manner in which that investment in copper conductor is employed in the operation of the business. Said differently, the utility expects to "consume" the service value of the conductor—not within a year—but over fifty years. Therefore, the investment is "capitalized" and added to rate base. Subsequently, each year 1/50th, or $1,600 of the capitalized cost less net salvage is recognized as depreciation expense associated with the conductor. Because depreciation expense is a component of the utility's overall cost of providing service, it is reflected in the design of rates that the utility charges customers. The $1,600 of annual depreciation expense associated with the conductor is accumulated with other depreciation and operating expenses and netted against operating revenues to determine net income for the period. Of the revenues collected during the year, $1,600 serves to recoup the portion of the capital investment less net salvage that is applicable to the period. Accordingly, the utility will reduce its rate base by the annual amount of the $1,600 that it recouped from customers. It does so by recording $1,600 in an account called the accumulated provision for depreciation or reserve. The value of the rate base is calculated by subtracting the total of the accumulated provision by depreciation from the original depreciable value of the investment. Each year the utility incurs depreciation expense, it adds the amount of expense to the reserve, thereby reducing rate base by that amount.

Q. IN ADDITION TO THE BASIC DEFINITION, WHAT ELSE CAN BE GLEANED FROM YOUR EXAMPLES?

A. First, the examples illustrate a major difference between depreciation expense and other operating expenses. In the case of copier paper, the utility must make a cash outlay during each annual period. In the case of the conductor, there is an initial outlay of cash to purchase and install the conductor; thereafter, the recognition of the annual component of expense applicable to the period does not involve cash outlays. For this reason, depreciation is referred to as a "non-cash" expense. However, the dollars that are collected and applied to defray this non-cash expense are as real to the utility and the customers who pay them through rates as the dollars that were expended to acquire the capital item or pay for the copier paper.

Q. DOES THE EXAMPLE OF THE CONDUCTOR ILLUSTRATE ANY OF THE ISSUES TO WHICH A DEPRECIATION STUDY MAY GIVE RISE?

A. Yes. The example illustrates the determination of the appropriate useful life; the assumed salvage value upon retirement; and the projected cost of removing the item from service that the utility will incur to realize the salvage. While the analytical techniques, which may involve statistical measurements, actuarial analyses, and review of historical and comparative industry data, can become technical and involved, all of the debates surrounding the establishment of appropriate depreciation rates involve the interplay between and among service lives and related remaining lives, salvage values, and cost of removal. If the utility assumes too short a useful life, the total depreciation expense will be allocated over too few periods, and the expense recognized in a single

period will be higher than it should be. If a utility understates expected salvage or overstates the cost of removing the item upon retirement, it will overstate the amount of depreciation expense that is allocated over the life of the asset. When in my testimony I observe that FPL has been overly aggressive in proposing depreciation rates, I mean that it continues to attempt to overstate depreciation expense currently through one or more of these means.

The example of the copper conductor also illustrates another important point. Depreciation practices applicable to assets that have long useful lives very quickly give rise to issues of intergenerational equity. For instance, if a utility has reason to believe that the conductor will be in service for fifty years, but proposes to depreciate it over only five years, the utility would be calling on current customers to bear an inordinate proportion of the cost of the investment, thereby subsidizing future customers, who will pay none of the cost of the asset providing service to them in the future.

There is another point that belongs in this introductory section. Setting depreciation rates necessarily involves the use of estimates and projections. If the estimates and projections are inaccurate, or if circumstances change such that estimates that were good at the time they were made are no longer valid, a utility's depreciation posture can require corrective action. Earlier I mentioned the reserve or the accumulated provision for depreciation, which serves to provide a "running total" of the extent to which individual assets or groups of assets have been depreciated. It is useful to

compare the actual reserve to the "theoretical reserve," or the reserve that would be necessary to enable the utility to remain "on course" to recoup its investment ratably over the current estimate of life and net salvage of the asset or assets in question at a given point in time.

If a "reserve excess" or "reserve deficiency" is discovered in the course of a periodic depreciation study, corrective action can be devised. The time frame that is appropriate for addressing an excess or a deficiency is in part a function of the severity of the imbalance. If the degree to which the actual depreciation experience is ahead of or behind schedule is slight, the typical regulatory response is to devise modified depreciation rates that will cure the imbalance over the remaining life of the asset. However, if the imbalance is so severe that it amounts to unfair and inequitable treatment of customers or the utility, the regulators have the obligation and the means with which to require remedial action that is more direct and immediate. In my testimony, I will demonstrate that by over collecting depreciation expense in the past, FPL has built a massive depreciation reserve excess -- so massive that the Commission should require FPL to return a portion of the excess to customers over a four-year period.

Q. WHAT DO YOU MEAN BY "DEPRECIATION RATES"?

A. A depreciation rate differs from the tariff rates that are applied to a customer's usage to calculate a bill for service. In the above example, I noted that $1/50^{th}$ of the investment in conductor cable would be quantified as depreciation expense for the annual period.

This translates into a "depreciation rate" of 2.0% of the investment annually. However, this is only a step in the ratemaking process. The depreciation rate is applied to the original gross investment to calculate the annual depreciation expense that the utility should recognize on its books. When the Commission conducts a revenue requirements case, the total depreciation expense is rolled into the overall revenue requirement that retail rates are then designed to recover.

Q. DO YOU HAVE ANY ADDITIONAL OBSERVATIONS OF A GENERAL NATURE BEFORE YOU BEGIN THE PRESENTATION OF YOUR ANALYSIS OF FPL'S DEPRECIATION STUDY?

A. Yes. Generally speaking, it is in an electric utility's financial self-interest to collect more dollars from customers than fewer dollars, to collect those dollars sooner than later, and, once having collected dollars, to keep them rather than returning them to customers. This is true of depreciation practices. Because depreciation expense results in revenues that do not have a concurrent cash outlay associated with them, depreciation expense is a source of cash flow, and higher depreciation expense means greater cash flow. Plus, recouping more of an investment in early years than would be warranted by the comparison of actual and theoretical reserves would reduce the risk of not recouping the investment in later years. Accordingly, even though issues of depreciation affect the timing of recoupment of capital investments rather than whether the utility should recover its claimed capital costs, a utility has an incentive to favor higher depreciation expense and higher depreciation reserves. The Commission therefore must scrutinize the utility's practices and studies to ensure that current

customers are not called on to bear more than their appropriate share of the depreciation expense.

B. Executive Summary

Q. PLEASE PRESENT YOUR MAIN POINTS IN SUMMARY FASHION.

A. As authorized by the terms of settlements that the Commission approved in various dockets since the early 2000's, FPL's has recorded in excess of a $2 billion credit to depreciation expense. This credit had the effect of reducing the accumulated provision for depreciation or reserve (thereby increasing rate base), and increasing net income by that amount. Despite these credits, FPL's own depreciation study portrays a small reserve deficiency of less than $100 million, which is based on its proposed depreciation parameters. Had FPL not applied depreciation credits over the past decade, its study would show a reserve surplus in excess of $2 billion, not a $100 million reserve deficiency. However, as I will show, the claimed $100 million reserve deficiency is unrealistic and is in reality a sizable surplus. FPL's proposed $100 million reserve deficiency reflects the result of inappropriate assumptions and rationales that FPL's depreciation witness employed in the course of his depreciation study. My analysis, based upon data, assumptions, and rationales that I develop and support in detail, reveals that FPL has a current reserve surplus for just its mass property (transmission, distribution and general plant) accounts of $1.5 billion. The surplus reserve would be even higher were I to incorporate the impact of my production plant recommendations.

The massive reserve excess necessarily means that current and past customers have continued to pay FPL far more than would be needed to enable FPL to be on track to recoup its investment in plant over the service lives of the plant. FPL proposes to correct the reserve imbalance by modifying the amount of depreciation on a going forward basis over its claimed 24 years of remaining life. In view of the size of the excess that customers have paid, the size of its overall rate increase request, prior Commission precedent and the resulting justification for remedying the situation, FPL's proposed response is unrealistic and unacceptable.

In order to minimize the points of contention regarding the more rapid amortization of some portion of the reserve surplus, I recommend that (1) only a portion of the mass property surplus be amortized, (2) the Commission's prior approved four-year amortization period be utilized, and (3) the determination of the portion of the mass property surplus to be amortized be based on the criteria testified to by Gannett Fleming elsewhere. By returning only this portion to customers over a period shorter than the remaining life, the Commission conservatively will leave FPL with a substantial cushion of excess in its reserve. Moreover, as OPC witness Dan Lawton testifies, requiring this more equitable treatment will not adversely affect FPL's strong, robust financial condition.

When the resulting mass property related reserve surplus of $923 million is amortized over four years, $231 million is available to reduce revenue requirements in each year, including the 2017 test period.

The above measures are needed to address FPL's significant depreciation reserve excess, which is the result of past practices and over collections. I have also examined the appropriate amount of depreciation expense that FPL should be allowed to recognize annually on a going forward basis. I find that FPL has overstated its need for depreciation expense. The overstatement of overall depreciation expense results from having employed inappropriate service lives, understating expected salvage, and overstating the projected cost of removing assets upon retirement. I have described the flaws and deficiencies in FPL's claims and have supported my proposed alternatives in the detailed discussion that follows. As a result of my detailed analysis, I recommend that the Commission reduce FPL's proposed annual depreciation expense by $303 million, in addition to the $231 million amortization noted above, based on plant as reflected in the Company's depreciation study.

The overall impact of my recommendations in the areas of correcting the massive reserve excess and reducing future depreciation expense is to reduce FPL's claimed revenue requirements by $533 million. The resulting depreciation rates have been provided to OPC witness Ralph Smith so they may be applied to the future test year plant balances and allocated to the retail jurisdiction.

Q. DOES YOUR RECOMMENDATION MEAN THAT FPL WILL NOT RECOVER ANY PART OF ITS CAPITAL INVESTMENT?

A. No, it does not mean that. In my testimony, I have not challenged or sought to disallow recovery of any of the investments in plant. My proposed adjustments affect only the

timing of the collection. If the Commission adopts my recommendation, the portion of the reserve excess that is amortized over four years will be added back to rate base at the same time. Over time, FPL will recoup all of the capital investment that the Commission deems prudent and reasonable.

C. <u>Analysis</u>

Q. PLEASE PROCEED WITH YOUR MORE DETAILED PRESENTATION.

A. The Company retained the Gannett Fleming firm to perform a new depreciation study, the results of which are sponsored by Mr. Allis. The Company's depreciation analysis identifies $1,654,234,623 of depreciation expense. (See Exhibit NWA-1, page 65). After reviewing the Company's presentation, data, responses to discovery requests, and information in the public domain, I conclude that the Company's request is significantly overstated. In fact, rather than a proposed increase in depreciation expense of $221,271,130 as identified by the Company in its depreciation study (See Exhibit NWA-1, page 90), a reduction of $302,702,842 as set forth on Exhibit_ (JP-1) to that proposed amount is warranted, after taking into account an annual $230,781,669 excess reserve amortization. In other words, a small reduction of $81.4 million compared to the existing depreciation rates is warranted.

A brief discussion of the various issues I will address in detail later in my testimony follows.

- **<u>Excess Reserve:</u>** The Company, through its depreciation study, identifies a $99 million reserve deficiency. That total deficiency is

comprised of production function deficiency of $738 million and a reserve surplus of $639 million applicable to mass property accounts. FPL's identified $99 million reserve deficiency disappears and turns noticeably to a large reserve surplus when one applies to FPL's production and mass property accounts the different depreciation parameters I recommend and support in my analysis. Consistent with the Commission's prior decisions, it is appropriate to return to customers some portion of such a large excess reserve over a period shorter than the remaining life. In order to remain conservative, and comply with Commission precedence, I recommend returning only a portion of the $1.5 billion surplus reserve attributable to mass property accounts I quantified based on my individual life or net salvage changes over a 4-year period. Limiting the return of the excess reserve to the portion greater than 10% of the theoretical reserve reflects reliance on the threshold that Mr. Allis supports in testimony elsewhere. Amortizing only the mass property related amounts in excess of the referenced threshold leaves the Company with a substantial cushion of remaining excess reserve, which can be addressed in future depreciation studies. OPC witness Dan Lawton establishes in his testimony that limiting the amount to be amortized to $923 million, and accomplishing the amortization over four years, will assure that the adjustment leaves FPL with very strong financial integrity. The impact of my recommendation for a separate four-year

amortization is a $230,781,669 annual depreciation expense credit for the next four years, beginning January 1, 2017.

- **Production Plant Life Spans**: The Company proposes an artificially short life spans (the time frame between when a unit goes into service and when it ultimately retires) for its combined cycle generating investment. The Company's proposed 40-year life span continues to underestimate the reasonable life expectancy of its investment in combined cycle generation. As a second step toward correcting this situation, the first being the Commission's life span adjustment to 30 years in the last case, I recommend that the life spans for combined cycle units be increased to 45 years. The approximate impact of this recommendation is a $47 million reduction to the Company's depreciation expense.

- **Interim Retirements**: Interim retirements are intended to represent limited downward adjustments to the life span for generating units due to items of investment that will retire and be replaced prior to the ultimate retirement date for a generating facility. The Company again proposes a method that is inappropriate for generation investment and which the Commission did not accept in the last case. The Company's proposed interim retirement approach and results are excessively aggressive. Correcting the method and level of interim retirements

results in an approximate $165.6 million annual reduction in depreciation expense.

- **Mass Property Life Analysis**: Mass property consists of transmission, distribution and general plant. The Company has relied on its interpretation of actuarial results to propose life characteristics for its various accounts. The Company's proposals are not the best statistical results obtained from its actuarial analysis and fail to recognize other Company specific information which would result in longer average service lives ("ASL"). After reviewing the Company's proposals on an account by account basis, I recommend adjustments to 14 mass property accounts which result in a $58 million reduction to annual depreciation expense.

- **Mass Property Salvage Analysis:** Rather than performing an appropriate evaluation of the Company's historical net salvage data to determine its applicability to future net salvage for the remaining investment in the Company's various plant accounts, the Company basically relies on hit-or-miss historical averages, whether they are appropriate or not. By failing to properly investigate and justify the representative nature of the historical data, FPL skewed its future net salvage proposals. Those proposals are not appropriate because they are not indicative of future expectations for the investment in each of

the Company's plant accounts. After my review and investigation of information that was also available to the Company, but which it chose to either not review or not include in its study, I recommend adjustments to the proposed net salvage level for 13 mass property accounts. The standalone impact of these recommendations results in a reduction of $62 million in annual depreciation expense for mass property.

- **Combined Impact:** Due to the interaction of life and salvage parameters, life spans and interim retirement levels, and the amortization of a portion of the excess reserve, the combined impact of my various recommendations is not simply the summation of each standalone adjustment. As shown on Exhibit__(JP-1), the combined impact of all adjustments results in a $533 million reduction to annual depreciation expense.

Q. ARE YOU AWARE OF THE MAGNITUDE OF YOUR RECOMMENDED ADJUSTMENT RELATIVE TO THE COMPANY'S REQUEST?

A. Yes. My recommendation must be viewed in two distinct categories: the return of a portion of excess reserve in the amount of $231 million for the next 4 years; and, $303 million in normal annual depreciation adjustments. Thus, the $303 million of annual normal depreciation adjustments, after reducing the book reserve due to the reserve

amortization, represents approximately 18% of the Company's request for normal depreciation expense.

To place my recommended adjustments in proper perspective, it is necessary to recognize that the Company has significantly over-collected depreciation expense from prior and current customers. The intent underlying the concept of depreciation is that the Company should recover 100% of what it is due, no more and no less. If the Company over-collects in earlier periods, then the remaining life approach to depreciation requires that a lower level of depreciation must be charged in the future in order to reach 100% recovery over the life of the investment. There can be no doubt that the Company has significantly over-recovered depreciation expense from customers. However, as the Commission will see once it reviews the individual account and production plant discussions contained in the balance of my testimony, the Company has proposed short life spans or ASLs and excessively negative net salvage values in an apparent attempt to reduce the level of excess reserve that still exists.

Q. IS THERE A PARTICULAR CONCERN YOU NEED TO ADDRESS AT THE OUTSET OF YOUR TESTIMONY?

A. Yes. The area of depreciation is comprised of numerous components, and within each component there are a potentially significant number of assumptions. Many of the decisions and assumptions are subjective in nature, but each may have the potential to swing substantial levels of revenue requirement in a rate case like this.

The subjective nature of depreciation analysis does not have to and should not be allowed to effectively default to a situation where the Company witness is allowed to rely on generalized factors, blended with the unsupported and unsubstantiated word "judgment", so that the witness can present a conclusory statement as fact. Conclusory statements, without adequate and meaningful support, do not rise to the level of being considered credible evidence and cannot be allowed to meet a utility's burden of proof. As expanded upon later, other regulatory bodies are again recognizing the importance of factual support and transparency for the basis of each life and net salvage parameter proposed by the utility. While this concept is not new or necessarily confined to the area of depreciation, the sheer magnitude of the depreciation revenue requirement at issue and the potential impact on intergenerational inequity magnifies and underscores the importance of the variation in attention to detail that is presented in contrast between the Company's presentation and my testimony.

Having testified on the topic of depreciation for almost four decades, I am well aware of the normal reaction to just the word depreciation, let alone hundreds of pages of testimony addressing what many would consider mindboggling minutia. Moreover, many times there is no black and white answer as to what is the most appropriate result, leaving the decision maker with the ultimate difficult task of adopting a result based on less then desired information. It appears that when that situation arises, the decision maker often relies on their perception of the witnesses' credibility garnished from observable practices and patterns.

Therefore, I believe it is critical that I highlight at the beginning of my testimony two global issues: (1) the Company's witness often use of the word "judgment" as a shortcut answer rather than the identification of a process that requires support and justification for his conclusion, and (2) the aggressive nature of the depreciation related actions taken by the Company, both historically and in this proceeding.

Q. ARE YOU STATING THAT THE COMPANY DID NOT PROVIDE A SIGNIFICANT QUANTITY OF MATERIAL IN SUPPORT OF ITS DEPRECIATION REQUEST?

A. No. What I am saying is there is a critical difference between quantity and quality of information provided. The Company provides a substantial quantity of information, but the critical components that support, explain, or specifically justify the actual proposed depreciation parameter is for the most part not presented, other than through conclusory statements based on the judgment of Mr. Allis. However, a mere process (judgment) is not an answer. Information and explanation of what was analyzed, and how various factors were considered, as well as why various factors were or were not considered, is necessary in order to provide definition to the judgment-based process.

In my opinion, the results of Mr. Allis' study are the equivalent of presenting a scatter diagram of dots with no indication whether all meaningful dots are presented, with no indication which dots were discarded or given less consideration, with no analysis showing that the dots are representative of what is expected to transpire in the future, and with no explanation why certain dots were selected and connected in a particular

order to arrive at the final proposal. Mr. Allis' study is more akin to the presentation of the scatter diagram with nothing but a conclusory statement that Mr. Allis' interpretation is the most reasonable result and should be adopted.

Q. HAS MR. ALLIS PROVIDED A NARRATIVE SPECIFICALLY ADDRESSING HOW HE DETERMINED HIS FINAL PROPOSAL FOR LIFE AND SALVAGE PURPOSES?

A. Yes, in theory, but not in reality. For example, for the mass property categories (transmission, distribution, and general plant), Mr. Allis proposes net salvage parameters that create $7 billion of capital recovery revenue requirements above and beyond the actual investment placed into plant in service. (See Exhibit NWA-1, page 65, multiplying net salvage value times the original cost). In support of the $7 billion proposal, Mr. Allis specifically states that his estimates were "based on judgment which incorporated analyses of historical cost of removal and salvage data, knowledge of property study, expectations with respect to future removal requirements and markets for retired equipment and materials." (See Exhibit NWA-1, page 41). Yet the actual basis for Mr. Allis' ultimate individual proposals are not explained, justified, and/or documented in a manner that demonstrates the validity of his underlying threshold assumption.

Q. WHAT IS MR. ALLIS' UNDERLYING THRESHOLD ASSUMPTION FOR HIS NET SALVAGE PROPOSALS?

A. Mr. Allis' proposals rest on his interpretation of simplistic historical averages of data that he modified prior to performing his averaging process. In order to properly rely on the results of historical average, it is essential to test and determine whether the modified historical database being analyzed is a valid and appropriate predictor of future retirement activity.

Q. IS MR. ALLIS' UNDERLYING THRESHOLD ASSUMPTION FOR HIS NET SALVAGE PROPOSALS VALID?

A. No. As discussed later in the account specific section of my testimony, Mr. Allis' threshold assumption is often not valid when (1) information obtained through discovery can be analyzed and tested, (2) all meaningful knowledge of the property being studied obtained through field inspections that Mr. Allis found worthy of being reduced to writing are reviewed and analyzed, and (3) Mr. Allis' expectations with respect to future removal requirements are vetted. In other words, the validity of Mr. Allis' threshold assumption rests only on his conclusory statement that it is valid, which is actually not a basis.

Q. CAN YOU PROVIDE A HIGH LEVEL EXAMPLE OF THE PROBLEM YOU HAVE IDENTIFIED?

A. Yes. I will use Account 365 – Distribution Overhead Conductors and Devices. By proposing a -80% net salvage for the largest mass property account, Mr. Allis is in

effect asking the Commission to approve the equivalent of $1.8 billion of additional capital recovery requirements for this single account. The proposed level of capital recovery is the equivalent of the combined investment of the entire Fort Myers combined cycle plant plus the Manatee combined cycle plant. There is no doubt that if the Company were to come to this Commission seeking approval for a capital recovery amount for two new large combined cycle plants totaling $1.8 billion that all parties would not only be entitled to, but would demand concrete and verifiable substantiation for such a request.

The "substantial" basis Mr. Allis provides in support of the request of $1.8 billion in revenue requirements over the remaining life of the assets for this account is his averaging of historical data and the following statement:

> The reason for increasing cost for overhead conductor are similar to those for poles, and include permitting requirements, safety requirements and traffic control requirements. However, similar to for poles there is the possibility that storm hardening work, which is more likely to be adjacent to major roads, could experience higher removal costs. It is therefore possible that costs cold [sic] moderate somewhat in the future.

(Emphasis added). (See Exhibit NWA-1 page 732).

While this presentation falls far short of substantial or meaningful support for a $1.8 billion request, it is all the more surprising given the Commission's statement in response to FPL's prior request for a -100% net salvage for this account. In the prior case the Commission stated that "[w]e believe it would be a useful exercise for FPL to perform an analysis to determine why the cost of removal is increasing and whether it is possible for FPL to make internal changes that might mitigate this trend." (Order No.

PSC-10-0153-FOF-EI at 68). What FPL presented in response to the Commission's request is what I call asking the Commission for "trust me" regulation, not an analysis. "Trust me" regulation reflects reliance on conclusory statements supported by the offering of the word "judgment" rather than meaningful information and analysis. FPL's response is precisely the opposite of what the Commission requested and what is necessary to substantiate the Company's request.

Moreover, a major problem with the acceptance of "trust me" regulation for this account is the fact that the proposed -80% net salvage represents a value at the high end of negative net salvage range for the industry as recognized by Gannett Fleming's own database. In fact only 3% of the utilities in the industry database reflect a value more negative than proposed by FPL. (See OPC's First Set of interrogatories No. 41 Attachment 1). Even if such proposal was appropriate, since someone must be the most negative, a greater degree of substantiation would be expected for support of such relative position. Again, that presentation is missing.

Q. CAN YOU EXPAND UPON YOUR PRIOR STATEMENT THAT OTHER REGULATORS ARE AGAIN RECOGNIZING THE IMPORTANCE OF MEANINGFUL PRESENTATION IN SUPPORT OF DEPRECIATION REQUESTS?

A. Yes. For example, even though a recent rate case ended in a settlement after the end of a full evidentiary hearing, the Public Service Commission of Montana added the following to its order accepting the settlement agreement between the parties:

> One of the concerns the Commission had in this case was the adequacy of the supporting documentation for the depreciation study performed by MDU's witness. The Stipulation resolves the issue for this rate case and establishes rates on a going forward basis. MDU is strongly encouraged to ensure there is supporting documentation for any change in depreciation rates going forward. The testimony of MCC's witness [Mr. Pous] should provide guidance to MDU to what will be expected for supporting documentation in its depreciation studies going forward.

(Emphasis added). (See ORDER NO. 7254b in DOCKET NO. D2012.9.100 before the Public Service Commission of Montana, IN THE MATTER OF THE APPLICATION of MONTANA-DAKOTA UTILITIES CO., a Division of MDU Resources Group, Inc., for Authority to Establish Increased Rates for Natural Gas Service).

Another recent example relating to the recognition of less than adequate support for depreciation related requests is a series of rate cases in California dealing with Southern California Edison Company ("SCE"). The order in the first case stated:

> We agree with TURN [Mr. Pous] that SCE's use of "judgment" is often opaque and SCE's explanation of changes to ASL [("average service life")] and dispersion patterns yielding the curve-lives tends to be limited and conclusory.

(Emphasis added). (See D.12-11-051 at page 665 before the California Public Utilities Commission ("CPUC")).

The CPUC continued in that order, informing SCE that it "should include a better description of changes to underlying causes of retirement, life characteristics, or mix of investments considered when forecasting ASL or NSR in an account." (See D.12-11-051 at page 686 before the California Public Utilities Commission). When SCE failed to heed the CPUC's request in the next rate case, the CPUC not only significantly reduced SCE's depreciation request, but also found it necessary to establish a new motivational standard so that the utility "can and must do more to explain and justify

its use of judgment in its depreciation showing."(See D.15-11-021, a Southern California Edison General Rate Case before the CPUC at page 395 of the Proposed Decision adopted on November 5, 2015). The CPUC also:

> direct[s] SCE to provide considerably more detail in support of its net salvage proposals for at least five of the largest accounts, as measured by proposed annual depreciation expense. At a minimum, this detail shall include:
>
> 1. A quantitative discussion of the historical and anticipated future Cost of Removal (COR) on a per unit basis for the large (greater than 15% as measured by portion of plant balance) asset classes in the account. This discussion should identify and explain the key factors in changing or maintaining the per-unit COR.
>
> 2. A quantitative discussion of the historical and anticipated future retirement mix (i.e., retirements among different asset classes), identifying and explaining the key factors in changing or maintaining this mix.
>
> 3. A quantitative discussion of the life of assets and original cost of assets being retired, in relation to the COR, on both a historical and anticipated future basis. This discussion should be integrated with and/or cross-reference the proposal for life characteristics.
>
> 4. An account-specific discussion of the process for allocating costs to COR.

The CPUC also "encouraged" parties in the next rate case to propose shifting "a portion of the under-collection [depreciation] risk from future customers to SCE's shareholders if the utility exhibits the same types of shortcomings in a widespread manner." In other words, regulators are finding it necessary to motivate utilities to do what is required to meet their assigned burden of proof associated with a major area of revenue requirement. (See D.15-11-021, a Southern California Edison General Rate Case before the CPUC at page 395 of the Proposed Decision adopted on November 5, 2015).

Q. DO REGULATORS NORMALLY REQUIRE AN APPLICANT TO SUPPORT AND JUSTIFY OTHER AREAS OF REVENUE REQUIREMENTS?

A. Yes. To my knowledge regulators, including this Commission, require meaningful support and justification for other areas of a utility's revenue requirement request. For example, when regulators investigate a utility's rate of return request, another major revenue requirement issue that has a subjective aspect, a substantial level of support and justification is normally demanded. Indeed, rather than simply accepting the utility's return on equity witness's proposal, which to a degree is subjective in nature, the underlying data, calculations and assumptions are investigated and analyzed. Comparable groups are investigated to determine if they are appropriately considered comparable, market conditions or assumptions are investigated and analyzed. What I have not seen as an acceptable presentation for establishing a return on equity level is the submission of limited generalized or unsupported statements that are then relied on as the basis for a final conclusory proposal. The same meaningful level of support and justification required for a rate of return proposal should also apply to depreciation proposals. A claim by a depreciation witness that what is presented here is the same or similar to what is accepted elsewhere, in and of itself, is not and should not be considered a standard of any type.

Q. PLEASE ADDRESS THE SECOND GLOBAL ISSUE YOU REFERENCE REGARDING THE AGGRESSIVE NATURE OF FPL'S DEPRECIATION PRACTICES?

A. Having analyzed hundreds of depreciation studies presented by utilities over the past several decades, it normally does not take too long to get a general sense of whether the request is reflective of reasonable assumptions and proposals based on valid positions or whether it is based on an aggressive approach to capital recovery. The underlying philosophy can be established and/or implemented by the utility or the depreciation analyst, or both. In this instance, it appears that both the utility and the depreciation analyst are in lock step as it relates to an aggressive depreciation proposal.

Q. DOES YOUR CONCLUSION REGARDING THE AGGRESSIVE NATURE OF FPL'S DEPRECIATION CONSULTANT HAVE ANY FACTUAL BASES?

A. Yes. For example, the concept of gradualism has long been a practice employed by most depreciation analysts when developing and proposing depreciation parameters. The need for gradualism is obvious as often the data and information being analyzed is limited and the quality of the data and information may be less than desired. The concept of gradualism is especially applicable to the area of net salvage proposals, given the greater degree of variability reflected within those historical transactions. While my extensive experience with Gannett Fleming in the past has been one that recognized a generalized aggressive approach to depreciation or capital recovery, that prior recognition was recently confirmed by Gannett Fleming. Within the past year, a Vice President of Gannett Fleming specifically admitted to the more aggressive nature being undertaken by his firm. The Vice President of Gannett Fleming stated in sworn testimony that:

> The ability to incorporate long periods of gradualism and moderate change to depreciation rates is no longer possible.

(See transcript volume 1 December 8, 2015 page 47 in Application 3524 before the Alberta Utilities Commission, in an AltaLink Management LTD. case).

Gannett Fleming's Vice President of operations went on to state during cross examination that:

> our goal is to get this right. And in days gone by, we thought maybe we had more time to get it right without a large impact. Now I think the need to get it right and properly implement the trends that we see is more important. And, like I said, in hindsight I probably stress the UAD decision more than I ought to have because there were other factors in behind that as well.
> Q. Okay. I'm going to ask two follow-up questions. One is: Does that mean that you are recommending similar approaches or implementing the observation of these trends more quickly in all jurisdictions, not just Alberta?
> A. Mr. Kennedy: Yes.
> Q. And that's consistent?
> A. Mr. Kennedy: That's consistent. As a matter of fact, the other analysts of Gannett Fleming and I had a number of conference calls and discussions about that. And because this isn't a unique situation in Alberta in terms of very large increases in depreciation expense. And then we believe that it really is important that we get these recommendations correct rather than trying to infer them or step them in over two or three steps. Because there's a risk of that – of having to punish future toll payers because we may be – we're too gradual in putting the recommendations into place.
>
> Depreciation has a – a big part of depreciation is the catch-up from the last set of parameters to the currently recommended parameters. And in these new – in the environment that we're seeing now with the large expenditures, the catch-up provision can get very large very fast.
>
> And so to answer your question directly as a company [Gannett Fleming] we view the need to implement recommendations quicker to avoid future catch-ups in our depreciation rates.

(See Vol. 1 December 8, 2015 transcript of Application 3524 before the Alberta Utilities Commission in the AltaLink Management LTD. case, pages 142-144).

In other words, Gannett Fleming as a group had decided that it no longer can rely on the standard depreciation concept of gradualism and was prepared to recommend

immediate implementation of perceived trends in the data as it pertains to more negative levels of net salvage. These statements, as well as the actions of Gannet Fleming can only be viewed as an aggressive approach towards depreciation.

Q. DO YOU HAVE ANY FACTUAL BASIS FOR CLAIMING FPL PRACTICES AGGRESSIVE FORMS OF DEPRECIATION?

A. Yes. As referenced by Gannett Fleming in the Alberta case, there is a concern when the level of catch-up becomes large. For over a decade, FPL has been in a significant catch-up position but not one of having the customers catching-up with prior underpayments, but rather with FPL crediting back to customers prior aggressive overcharges. As noted elsewhere in this testimony, the Company has had and continues to have a significant surplus reserve imbalance. The surplus exists in part due to the aggressive proposals of both life and net salvage parameters that FPL has proposed in prior proceedings.

Again, using Account 365 as an example, FPL had a -50% net salvage in place prior to its 2007 depreciation study. Based on the results of limited historical averaging and a perception of a wide variation in industry ranges, FPL proposed a -100% net salvage for this account in the last rate proceeding dealing with depreciation rates. (See Exhibit CRC-1, page 577 in Docket No. 080677-EI). Not only did that proposal represent a 100% increase in proposed net salvage from the existing level all at one time (certainly not a form of gradualism), but it represented a value well above the most negative net salvage value identified for the industry. The Commission wisely denied FPL's request and adopted a -60% net salvage. Now in this proceeding, FPL again relies on limited

and questionable information and proposes a -80% net salvage, which is still at the high end of the industry range for negative values.

In summary, a more middle of the road approach towards depreciation would recognize the quality of the underlying data upon which proposals are based, as well as the industry related relative position of such results and rely on the concept of gradualism to step-wise move in a direction if it was warranted. Alternatively, an aggressive approach as demonstrated by FPL would be to reach for an unrealistic value based on limited and questionable data, ignoring the concept of gradualism and play catch-up later if necessary, while generating large levels of cash flow for the Company.

It is this combination of aggressive depreciation practices by both FPL and its depreciation consultant that the Commission should be mindful of when reviewing the balance of my testimony and the information provided by the Company.

SECTION III: DEPRECIATION

Q. WHAT IS DEPRECIATION?

A. There are two commonly cited definitions of depreciation. The first comes from the Federal Energy Regulatory Commission ("FERC"):[1]

> 'Depreciation,' as applied to depreciable plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the

[1] Title 18 of the Code of Federal Regulations ("CFR") Part 101, Definition 12.

causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities.

The second definition, from the American Institute of Certified Public Accountants ("AICPA"), is similar:

> Depreciation accounting is a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any) over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation. Depreciation for the year is a portion of the total charge under such a system that is allocated to the year. Although the allocation may properly take into account occurrences during the year, it is not intended to be a measurement of the effect of all such occurrences.

Q. WHAT ARE THE TWO GENERAL FORMULAS USED IN DETERMINING DEPRECIATION RATES?

A. The whole life and the remaining life technique are the most commonly used formulas.

The whole life technique is as follows:[2]

$$\text{Depreciation Rate (\%)} = \left[\frac{\frac{(\text{Original Cost} - \text{Net Salvage})}{\text{Average Service Life}}}{\text{Original Cost}}\right]$$

The remaining life technique is as follows:

$$\text{Depreciation Rate (\%)} = \left[\frac{\frac{\text{Original Cost} - \text{Accumulated Provision For Depreciation} - \text{Net Salvage}}{\text{Remaining Life}}}{\text{Original Cost}}\right]$$

[2] A theoretical depreciation reserve calculation is developed and compared to the actual accumulated provision for depreciation in conjunction with the whole life technique. If the differential is significant, an amortization of the differential over some period of time may be recommended.

The two formulas should equal each other when the difference between the theoretical reserve and the actual accumulated provision for depreciation is recovered over the remaining life of the investment under the whole life technique.

Q. ARE THERE ADDITIONAL CONSIDERATIONS IN DEPRECIATION BEYOND THE DEFINITIONS?

A. Yes. The definitions provide only a general outline of the overall utility depreciation concept. In order to arrive at a depreciation-related revenue requirement in a rate proceeding, a depreciation system must be established.

Q. WHAT IS A DEPRECIATION SYSTEM?

A. A depreciation system constitutes the method, procedure, and technique employed in the development of depreciation rates.

Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "METHOD."

A. "Method" identifies whether a straight-line, liberalized, compound interest, or other type of calculation is being performed. The straight-line method is normally employed for utility depreciation proceedings.

Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "PROCEDURE."

A. "Procedure" identifies a calculation approach or grouping. For example, procedures can reflect the grouping of only a single item, items by vintage (year of addition), items

by broad group or total grouping, or equal life groupings. The average life group ("ALG") procedure is used by the vast majority of utilities.

Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "TECHNIQUE."

A. There are two main categories of techniques with various sub-groupings: the whole life technique and the remaining life technique. The whole life technique simply reflects calculation of a depreciation rate based on the whole life (*e.g.*, a 10-year life would imply a 10% depreciation rate over the life of the plant). The remaining life technique recognizes that depreciation is a forecast or estimation process that is never precisely accurate and that requires true-ups in order to recover exactly 100% of what a utility is entitled to over the entire life of the investment. Therefore, as time passes, the remaining life technique attempts to recover the remaining unrecovered balance over the remaining life or other period of time. Most utilities rely on a remaining life technique in utility rate matters.

Q. DO THE METHODS, PROCEDURES, AND TECHNIQUES INTERACT WITH ONE OTHER?

A. Yes. Different depreciation rates will result depending on what combination of method, procedure, and technique is employed. Differences will occur even when beginning with the same ASL and net salvage values.

Q. WHAT IS NET SALVAGE?

A. Net salvage is the value obtained from retired property (the gross salvage) less the cost of removal. Net salvage can be either positive, in cases where gross salvage exceeds cost of removal, or negative, in cases where cost of removal is greater than gross salvage.

Q. HOW DOES NET SALVAGE IMPACT THE CALCULATION OF DEPRECIATION?

A. The intent of the depreciation process is to allow the Company to recover 100% of investment less net salvage. Therefore, if net salvage is a positive 10%, then the utility should recover only 90% of its investment through annual depreciation charges, under the theory that it will recover the remaining 10% through net salvage at the time the asset retires (90% + 10% = 100%). Alternatively, if net salvage is a negative 10%, then the utility should be allowed to recover 110% of its investment through annual depreciation charges so that the negative 10% net salvage that is expected to occur at the end of the property's life will still leave the utility whole (110% - 10% = 100%).

SECTION IV: <u>RESERVE IMBALANCE</u>

Q. WHAT IS THE FUNDAMENTAL PURPOSE OF DEPRECIATION?

A. As I have stated, depreciation is the recovery of invested capital less net salvage over the life of the investment. It is intended to match the recovery of the investment less net salvage with the periods of time in which the related asset is employed, thereby

recouping the investment from all of the customers that received the benefit of the investment.

Q. IS THE RECOVERY OF CAPITAL THROUGH DEPRECIATION A PRECISE PROCESS?

A. No. The depreciation process for utility ratemaking relies on forecasting the future life and net salvage of the investment. As with any forecasting process, there are inherent inaccuracies that will exist whether due to inappropriate forecasts of mortality characteristics or real changes in life and salvage characteristics over time. In recognition of the inherent inaccuracies, depreciation studies should be performed on a regular basis and should incorporate a true-up provision to address recognized excesses or deficiencies that are identified.

Q. HOW ARE RESERVE EXCESSES OR DEFICIENCIES IDENTIFIED?

A. The normal process is to calculate what is called a theoretical reserve and compare that value to the actual book reserve of the utility. The theoretical reserve is the calculated balance that would be in the accumulated provision for depreciation (FERC Account 108), sometimes called the reserve, at a point in time if current depreciation parameters (i.e., current life and salvage estimates) had been applied from the outset. The theoretical reserve measures the amount of depreciation expense a utility should have collected in order to be "on schedule" with respect to recovering its investment over the life of the depreciable asset. The book reserve reflects what *actually* has been collected or incurred. One can compare the book reserve to the theoretical reserve. If

the book reserve is greater than the theoretical reserve, then the utility has collected more than is needed as of that point in time; it is ahead of schedule. The difference is a reserve excess or surplus. If the theoretical reserve is greater than the book reserve, the utility has under collected as of that point, it is behind schedule and a reserve deficiency exists.

Q. WHAT ARE THE GUIDING PRINCIPLES THAT SHOULD BE CONSIDERED IN DETERMINING THE CAPITAL RECOVERY PATTERN THROUGH DEPRECIATION OVER TIME?

A. In my opinion, the overriding considerations of fairness and equity that govern the utility ratemaking process mandate adherence to the matching principle. In other words, the generation of customers that causes an expense or cost to be incurred should be the generation of customers that pays for such expense or cost through the rates charged for usage of the final product, in this case electricity. The matching principle attempts to achieve the goal of eliminating intergenerational inequities. Intergenerational inequities occur when one set or generation of customers pays too much or too little for its use of the investment necessary to provide electricity, and transfers either an undue benefit or undue burden to some future set of customers.

Q. HAS THIS COMMISSION HISTORICALLY RECOGNIZED THE MATCHING PRINCIPLE WHEN IT COMES TO CAPITAL RECOVERY THROUGH DEPRECIATION?

A. Yes. When capital recovery becomes materially imbalanced between generations of customers, as measured by the difference between the theoretical and book reserve, normally one of two industry options is employed. The two options for truing-up or correcting the imbalance are (1) to amortize the calculated differences over a short period of time, or (2) to simply implement new depreciation rates based on the remaining life technique where the recovery period is the remaining life. This Commission has established a long and identifiable policy of correcting material reserve imbalances by one of or a combination of these measures: (1) reserve transfers, (2) one time reserve adjustments based on changes to revenue requirement areas other than depreciation, and (3) amortizing the reserve differences over periods much shorter than the remaining life of the investment. In addition to these practices, this Commission approved settlements in prior FPL's rate cases that allowed FPL to reduce revenue requirements by over $2 billion over the past decade through credits to depreciation expense. Rigid adherence to "remaining life" concepts would not have permitted this flexibility.

Q. WHAT HAS THE COMMISSION STATED AS ITS UNDERLYING POLICY OR BASIS WHEN ADDRESSING THE TREATMENT OF RESERVE DIFFERENCES OR INTERGENERATIONAL INEQUITIES?

A. The Commission has adopted the position that depreciation (or similarly, decommissioning or dismantlement) reserve differences "*should be recovered as fast as possible*, unless such recovery prevents the Company from earning a fair and reasonable return on its investments." (Emphasis added). (See Order No. PSC-93-

1839-FOF-EI). In another case, the Commission adopted a one-year write-off for a portion of a utility's reserve deficit by stating that "we believe that it [the deficit] should be *written off as quickly as possible*." (Emphasis added). (See Order No. 13918). In yet another case, the Commission addressed the fairness issue as it relates to intergenerational inequity. In establishing a funded nuclear decommissioning reserve the Commission stated "[f]*airness dictates* that those receiving services and imposing costs be obligated to pay those costs, instead of placing the risk of recovery on other ratepayers who may not get service from the nuclear units." (Emphasis added). It went on to state, "that a further delay in changing rates to recognize the responsibility of current ratepayers to pay the full cost of operating the nuclear generators *simply continued an already unfair situation*. We determined that *it was unfair that current ratepayers were not paying their full share and could therefore properly change FP&L's and FPC's rates to alleviate unfair, unjust and unreasonable rates.*" (Emphasis added). (See Order No. 13427).

Q. IN THE CASES YOU CITED, DID THE AMOUNT OF THE RESERVE IMBALANCE THAT THE COMMISSION DECIDED TO CORRECT OVER A PERIOD SHORTER THAN THE REMAINING LIFE APPROACH A BILLION DOLLARS?

A. No.

Q. DOES AN EXCESSIVE LEVEL OF RESERVE AFFECT REVENUE REQUIREMENTS?

A. Yes. The effect of an excessive reserve imbalance of this magnitude on revenue requirements is significant, no matter the approach undertaken to correct this situation. The shorter the period utilized to return the excess to current customers, the greater the revenue requirement impact in this case. For example, the four-year amortization of the $923 million excess reserve that I recommend increases depreciation expense by $19 million annually. However, if the same excess reserve amount is credited back to current customers over a five-year rather than a four-year period, the increase in annual depreciation expense does not change but the annual revenue requirement impact would decline by $46,156,334 from $230,781,669 ($923,126,674/4) to $184,625,335 ($923,126,674/5).

Q. SHOULD THE CORRECTIVE TREATMENT OF A RESERVE IMBALANCE DIFFER DEPENDING ON WHETHER IT IS MATERIAL EXCESS OR A MATERIAL DEFICIENCY?

A. No. The identical rationale should be applied to either scenario. In this regard, it is important to note that under the depreciation process and in terms of the earnings based measure (ROE) that this Commission uses to determine fair, just and reasonable rates, the utility will not be "harmed" by a corrective adjustment. The matter is one of the timing of recovery. On the other hand, imbalances have prejudicial impacts on certain customers.

Q. WHY DO YOU REFER TO *MATERIAL* IMBALANCES RATHER THAN IMBALANCES IN GENERAL?

A. Any process that involves estimates will result in actual values that differ from the predicted values. As previously noted, I do not believe most utilities allow identified imbalances of this magnitude to be created. Generally speaking, by revisiting the reserve situation with a comprehensive study every few years, one would reasonably expect the variance between the theoretical reserve and the book reserve to stay within reasonable bounds. When reserve imbalances occur, they are normally treated through the remaining life process. Not every discrepancy between theoretical and book reserves is so large as to require a departure from the method of recalculating the accrual that will retire the asset over its remaining life. However, the greater the disparity in the reserve, the greater the level of intergenerational inequity that exists. The greater the level of intergenerational inequity, the more compelling becomes the corresponding rationale for addressing the imbalance over a shorter period. This Commission has consistently recognized and acted upon these inequities.

Q. IS THERE ANY REASONABLE QUESTION IN THIS CASE WHETHER A SIGNIFICANT OR MATERIAL EXCESS IN THE DEPRECIATION RESERVE EXISTS?

A. No, in my view there is no room for argument on this question. While the Company identifies a $99 million total deficiency in its depreciation study (See Exhibit NWA-1 page 116), that value is severely skewed due to the numerous inappropriate life and/or net salvage parameters created by the aggressive depreciation practices employed by

FPL and Gannett Fleming. Moreover, I estimate that if the Commission were to adopt approximately half of my recommendations the resulting reserve surplus would still approach $1 billion.

Q. DOES IT MATTER WHETHER THE COMPANY'S OVERLY AGGRESSIVE DEPRECIATION PRACTICE IS IMPLEMENTED INTENTIONALLY?

A. No. The fact is that the prior depreciation parameters and actual historical events have resulted in the material excess imbalances that continue to exist today. The need to correct the imbalance situation now is not dependent on what caused the material excess reserve position. In fact, while some might feel the need to know what precisely caused the material imbalance when determining the corrective option to employ (shorter amortization period or remaining life), I submit that customers who have paid more than their cost of service in the past care less about the factors that led to the over collection and more about the action taken to correct the situation. Moreover, the matching principle is indifferent as to the cause of the intergenerational inequity. The real issue, as previously recognized and acted on by this Commission in the context of reserve deficiencies discussed in the citations above, is how and how quickly to correct the inequity.

Q. YOU HAVE USED THE TERM "MATERIAL IMBALANCE" SEVERAL TIMES. IS THERE A PRECISE POINT AT WHICH THE IMBALANCE BECOMES MATERIAL?

A. No, not really. However, I am aware of one jurisdiction that has quantified a 5% difference between the theoretical and book reserve as the point at which a correction process will be implemented. As previously noted, Mr. Allis has testified regarding addressing a reserve imbalance in a New York case based on a 10% threshold of the theoretical reserve level.

Q. WHAT PERCENTAGE LEVEL OF RESERVE IMBALANCE EXISTS FOR FPL?

A. The Company's filing identifies an 11% reserve deficiency for production plant, a 17%, 7% and 9% reserve surplus for transmission, distribution and general plant, respectively. (See Exhibit NWA-1 page 116). The transmission, distribution and general plant levels are prior to the additional $875 million level of excess reserve based on my recommended net salvage and life adjustments. It would require a very small adjustment to production depreciation parameters to reduce FPL's claimed reserve deficiency below the 10% threshold (approximately $73 million of reserve not expense adjustment), but a much larger level of adjustments to exceed the 10 % threshold level for a reserve surplus (approximately $1.3 billion of reserve not expense adjustment), coupled with the required effort to perform those theoretical reserve calculation. I have not undertaken that task, given the diminishing returns for the amount of time and customer's expense involved. This is an effort that could be undertaken in the next study.

Q. GIVEN FPL's REMAINING LIFE APPROACH TO THE RESERVE IMBALANCE, WHAT REMAINING LIFE PERIOD IS REFLECTED IN THE COMPANY'S DEPRECIATION STUDY?

A. While the Company's depreciation study reflects an overall 23.65-year remaining life for its entire remaining unrecovered depreciable investment (See Exhibit NWA-1 page 65), the remaining life by function varies noticeably. The functional remaining life for production, transmission, distribution and general plant are 17.55, 36.03, 32.28, and 17.24 years, respectively.

Q. DOES THIS POSITION TAKEN BY FPL ADEQUATELY ADDRESS THE INTERGENERATIONAL INEQUITY THAT EXISTS FOR CURRENT CUSTOMERS?

A. No. For example, the largest reserve imbalance based on my recommendations is for the distribution function with a 32.28-year remaining life. (See Exhibit NWA-1 page 65). Given both the growth in customers and the estimated age of existing customers, a sizeable change will occur over the next 30-plus years that will ensure that there will not be an appropriate matching of the credit to the customers that historically overpaid for their share of depreciation. I submit that the current intergenerational inequity that exists due to the current excess of the depreciation reserve created by prior accelerated levels of depreciation (whether intentional or not) cannot reasonably be addressed or rectified by relying on remaining life periods as long as 36 years.

Q. IS THERE A VALID CONCERN REGARDING A POTENTIAL TURNAROUND OF THE EXCESS RESERVE IN THE NEAR TERM FUTURE?

A. No. I have purposely tempered my recommendation to be conservative. Under the circumstances I believe there is no realistic scenario under which FPL could swing to a reserve deficiency prior to the next study. Certainly, that remote prospect is more than outweighed by the prejudice to current customers if the Commission were to take no action to address the severe imbalance more rapidly than the remaining lives of the assets. My position is that there is no realistic basis or possibility that the excess reserve would turn around and become a deficiency by the time the next depreciation study is completed in four years.

Q. WHAT IS YOUR SPECIFIC PROPOSAL REGARDING THE TREATMENT OF THE RESERVE EXCESS?

Q. I recommend an approach that should satisfy all concerns if all or even a material portion of my recommended adjustments to net salvage and life parameters are adopted. I recommend that $923,126,674 of the $1,513,903,241 mass property related reserve surplus associated with my recommended adjustments be returned to customers over the next 4-years. The remaining $590,776,567 of mass property related reserve surplus associated with my recommended adjustments provides a safety cushion for those who may believe that one is necessary. This approach addresses the matching principle as it relates to the intergenerational inequity problem, but not quite to the degree that this Commission has previously found appropriate in other cases. This approach also takes

into account the need to gauge the impact of a shorter amortization period so as to not impair the financial integrity of the Company. I have discussed the impact of my recommended adjustment with OPC's financial, policy and accounting witnesses, who have not expressed a concern that FPL will be unable to maintain the healthy coverage ratios adequate to access the capital markets on reasonable terms if they implement my specific amortization recommendation. Dan Lawton addresses this subject in detail.

Q. **WHAT IS THE IMPACT ON REVENUE REQUIREMENTS IF YOUR RECOMMENDATIONS TO THE RESERVE EXCESS IS ADOPTED?**

A. Amortizing the $923,126,674 of excess reserve over a 4-year period results in a $230,781,669 reduction in depreciation expense, and also increases the level of normal remaining life calculated depreciation expense I would have recommended absent this adjustment by $24,432,693.

SECTION V: <u>OTHER PRODUCTION PLANT – COMBINED CYCLE LIFE</u>

Q. WHAT IS THE ISSUE IN THIS PORTION OF YOUR TESTIMONY?

A. This portion of my testimony will deal with a limited increase to the Company's proposed life span for its combined cycle generating facilities.

Q. WHAT LIFE SPANS HAS THE COMPANY PROPOSED FOR ITS VARIOUS COMBINED CYCLE GENERATORS IN OTHER PRODUCTION PLANT ACCOUNTS 341 THROUGH 346?

A. The Company proposes a substantial 10-year increase in life span from the Commission adopted 30-year value. Moreover, FPL's proposed 40-year life span for its combined cycle generating facilities represents a 15-year or 60% increase from the 25-year life span it proposed in its last depreciation study. (See Exhibit NWA-1 page 662).

Q. HOW DOES THIS SUBSTANTIAL INCREASE IN LIFE SPAN CORRESPOND WITH YOUR PRIOR STATEMENTS REGARDING FPL'S AGGRESSIVE APPROACH TO DEPRECIATION?

A. The Company's substantial increase in the life span for its combined cycle generating facilities continues its aggressive approach to depreciation, but not in the conspicuous manner that it presented in the prior case. In the prior case the Company attempted to take advantage of the early stages of industry's limited experience with the life characteristic potential of combined cycle generating facilities and the overall uncertainty relating to pressures being placed on other sources of generation when it proposed a 25-year life span. That 25-year life span proposal was not realistic then, and the movement to a 40-year life span in this case should not be viewed as change away from its aggressive approach to depreciation. Rather, FPL's 40-year life span proposal in this case should be viewed as a continued effort to understate the realistic life span for its combined cycle generating facilities based on the current understanding and expectations of their life characteristics.

Q. WHAT IS THE COMPANY'S EXPLANATION FOR ITS SUBSTANTIAL INCREASE IN LIFE SPAN?

A. The Company states that the "expectation of a longer service life is due to the significant investments and planned investments in improved equipment at these plants." The Company also states that its "expectation is that the significant investments in these plants will improve the heat rates for these facilities and as a result a longer life span for combined cycle plants than the current approved life span is attainable." (See Exhibit NWA-1 page 662).

Q. WHAT DO YOU BASE YOUR STATEMENT ON THAT THE LIFE SPANS FOR THE COMPANY'S COMBINED CYCLE GENERATING FACILITIES ARE STILL SHORT?

A. The available options of meeting load requirements in the future have changed significantly since the last case. FPL has retired 13 steam-fired generating units since the last case. (See Exhibit NWA-1 page 629). Moreover, the Company's expectation is that approximately 5,000 mW of steam and nuclear capacity will be retired in the next 17 years. (See Exhibit NWA-1 page 38). One of the options available to meet this retirement of capacity this capacity is recognize a longer life span for its fleet of combined cycle units. Indeed, the Company has already partially recognized technological advancements as a basis for extending the life span to 40 years. The Company's current proposal still falls short of what standard economic theory dictates: large capital intensive investments should be operated to maximum levels in order to deliver the economic worth that such facilities are capable of obtaining. The application

of the standard economic theory has already translated in engineering advancements, which show no signs of stopping at this point.

Q. WHAT IS YOUR BASIS FOR YOUR STATEMENT THAT TECHNOLOGY WILL HELP PROVIDE THE BASIS FOR A LONGER LIFE SPAN?

A. I have been performing utility depreciation analyses for over 40 years. At the beginning of my career I did experience utilities proposing life spans for steam-fired generating facilities in the low to mid 30-year range. Those expectations were based on claims of typical design life and concerns about higher temperature and pressure operating characteristics of units being placed into service in the 1960s and early 1970s. At that time no empirical data existed to demonstrate that 30 to 35-year life spans were unreasonably short, even though older units operating at lower temperatures and pressures had operated for longer life spans.

As time progressed and more empirical data became available the life span issue changed from one where utilities would propose 30 to 35-year lives to where the utilities were proposing upper 30 to low 40-year lives. In other words, as time progressed, it became obvious that units were operating for time periods approaching or exceeding the initially proposed 30 to 35 years of operation. Moreover, with no plans for retirement, utilities could no longer support the initial artificially short life spans. As additional years passed the life span discussion for steam-fired generation continued to change. Utilities began proposing 45 and 50-year life spans, again in recognition of reality. The process continues through today. In the last several years

utilities and regulators are recognizing that 50 and 60-year life spans are more appropriate for steam-fired generating facilities.

The same expansion of life spans noted for steam-fired units has also been mirrored by nuclear units, hydroelectric and simple cycle -- other production units. Whether it has been the advancement of new technology, the recognition that the estimates based on old technology were artificially short, or other factors, the results have been the same. All utilities have and will continue to expend funds on an annual basis to maintain and extend the life of large capital-intensive assets such as combined cycle units as long as economics permits. This in fact is the basis for FPL's movement to a 40-year life span in this case.

Q. HAS THE INDUSTRY ALREADY RECOGNIZED A 45-YEAR LIFE SPAN COMBINED CYCLE GENERATING FACILITIES?

A. Yes. Moreover, Gannett Fleming testifies elsewhere to 45-year life spans for combined cycle generating units. For example, in the current Oklahoma Gas and Electric Company case before the Oklahoma Corporation Commission ("OCC"), Gannett Fleming testified to a 45-year life span for the Red Bud Combined cycle generating station. (See Direct Exhibit JJS-2 page III-7 in Cause No. 201500273 before the OCC). The same recommendation was supported in testimony by Gannett Fleming in the recent El Paso Electric Company case before the PUCT. (See Schedule D-5 page 55 in Docket No. 44941 before the PUCT).

Q. IS THERE ANY BASIS TO DENY A 45-YEAR LIFE SPAN BASED ON CLAIMS OF HARSH OPERATING CONDITIONS IN FPL'S SERVICE AREA?

A. No. FPL is already addressing the corrosion issue identified as a problem associated with operating in a harsh environment. (See Exhibit NWA-1 page 662). This is the normal process that is to be expected as each utility progresses through the learning curve of bringing new units into service with the challenges presented by each different service territory.

Q. WHAT IS THE IMPACT OF YOUR ADJUSTMENT?

A. The standalone impact of this adjustment is a reduction to depreciation expense of $47 million annually.

SECTION VI: <u>INTERIM RETIREMENTS</u>

Q. WHAT ISSUE DO YOU ADDRESS IN THIS PORTION OF YOUR TESTIMONY?

A. The issue in this portion of my testimony addresses the Company's choice for estimation of interim retirements and the ultimate interim retirement life-curve combinations proposed for production plant accounts.

Q. WHAT ARE INTERIM RETIREMENTS?

A. Interim retirements have been characterized as a fine-tuning adjustment to the life span analysis. The life span method is used in estimating the retirement date for any large

unit of property such as an entire generating unit. The theory behind interim retirement rates is that even though a large unit of property such as a generating unit might retire in 60 years, in the interim period many components have to be replaced in order to maintain the overall generating facility in operating condition. An analogy to this would be a car which might be anticipated to have a service life of 10 years. During the 10-year life of the car, the owner might have to replace the battery, tires, alternator and other components in order to maintain the automobile in a safe and operable condition. Therefore, even though the automobile may have an overall 10-year life span, its dollar weighted adjusted life span may be 9.8 years due to the averaging of the automobile's overall life span with the average of the individual replaced components. In other words, the interim retirement rate would be a fine tuning factor used to reduce the service life from 10 years to 9.8 years.

Q. HAS THE COMPANY INCORPORATED THE IMPACT OF INTERIM RETIREMENTS IN ITS DEPRECIATION ANALYSIS?

A. Yes. The Company proposes to implement a calculation procedure for interim retirements based on an "estimated" interim retirement survivor curve. (See Exhibit NWA-1 page 35).

Q. DO YOU AGREE WITH THE COMPANY'S POSITION?

A. While I normally agree that interim retirements should be included in the calculation of production plant depreciation rates, there is a strong argument to be made against doing so in this case. Given the significant variations in life spans between depreciation

studies, the significant variations in proposed interim survivor curves between depreciation studies, reliance on historical data that has changed in a theoretically impossible manner, and FPL's decision to again rely on a truncated interim retirement Iowa Survivor curve method that was challenged and not accepted in the last case, all cast serious doubt on the appropriateness of fine tuning the life span method in this case.

Further to this point is the fact that some jurisdictions prohibit the use of interim retirements in the calculation of production plant depreciation rates. For example, the Public Utility Commission of Texas ("PUCT") does not permit interim retirements since they are considered too speculative and not known and measurable both in magnitude and timing. The PUCT recognizes interim retirements after they have occurred and at that point they are recoverable in subsequent periods.

Q. FIRST, PLEASE EXPLAIN THE PROBLEMS WITH THE COMPANY'S PROPOSED METHOD.

A. The Company's approach relies on an actuarial analysis of the historical data to determine an interim retirement life-curve combination. Actuarial analyses are normally performed on more homogeneous-type investments that are not generally dependent on one another, such as poles or wires. In particular, the varying types of investments within each of the major production plant accounts do not reasonably lend themselves to actuarial analyses. In other words, the retirement forces experienced by electric motor drives recorded in Account 312 are noticeably different than the

retirement forces on smoke stacks, also recorded in Account 312. However, the Company's actuarial approach treats all items in the same account as single type of item for life estimation purposes, the effect of which can be magnified by a truncated Iowa Survivor curve approach. Moreover, due to the greater level of variance in the types of assets within production plant accounts, in conjunction with an inconsistent accounting approach compared to mass property accounts, the effect on the estimated remaining life can be distorted by a truncated Iowa Survivor curve approach. While the use of an interim retirement ratio can also exhibit some of these same issues, it normally limits the aggressive rate of change in life characteristics that are inherent in many life-curve combinations assumed by FPL.

Q. DOES THE COMPANY'S APPROACH PRODUCE UNUSUAL AND UNREALISTIC RESULTS IN CERTAIN CASES?

A. Yes. The results of the Company's actuarial analysis, if not properly reviewed and investigated by an experienced depreciation analyst can unrealistically create intergenerational inequity problems. For example, the Company states that "this account [Account 343 – Prime Movers – Capital Spare Parts] has been subdivided between capital spare parts and the remaining assets in Account 343, referred to as – Prime Movers – General." (See Exhibit NWA-1, page 693). While Mr. Allis states that some of the components of this proposed subaccount "have shorter service lives than the plants themselves" (See Exhibit NWA-1, page 693), this is no different than other production plant accounts for which he did not create a subaccount. However, by inappropriately proposing the creation of this subaccount along with his use of a

truncated Iowa Survivor curve approach to interpret the results of actuarial analyses, he has been able to aggressively increase depreciation expense by tens of millions of dollars.

The results of Mr. Allis' proposals for this new subaccount yielded the selection of a 9L0 life-curve combination (See Exhibit NWA-1, page 694), which was applied to $2.6 billion or 24% of the entire combined cycle production plant investment. (See Exhibit NWA-1, pages 54-63). The 9L0 life-curve combination reflects an expectation that 30% of the investment will be retired by age 5. While an inexperienced depreciation analyst, or one that has an pre-determined aggressive outlook to depreciation, might jump to a 9L0 life-curve combination based on the review of the historical data that reflects that 50% of the historical data for this subaccount was retired by age 5 (See Exhibit NWA-1, page 186), a more realistic view of the information would not result in the same conclusion.

Q. PLEASE ELABORATE.

A. A more realistic view of the information would recognize the dramatic changes in the dollar level of exposures from age 0 to age 7, and the dramatic levels of retirement between ages 0.5 to 5.5. (See Exhibit NWA-1, page 187). In addition, given the fact that FPL's depreciation studies are separated by a seven-year period (2007-2014), an experienced depreciation analyst would recognize the statistical instability of the historical results and not rely on such relationships as being predictive of the future without significant and meaningful support. Indeed, normally expenditures of $140

million for items that will be consumed (retired) within the year of being purchased would normally fall within one of two categories: expense items or abnormal activity, possibly even those covered by warranties or insurance. (See Exhibit NWA-1, page 187). The reasonableness of relying on this type of statistically unstable data is even more curious given that Mr. Allis notes that some of the combined cycle units "are being upgraded to newer, more robust" components, and that these "components both mitigate issues with corrosion and have longer inspection intervals (32,000 hours for many components compared to 24,000 hours for 7FA.03 [the older] components." (See Exhibit NWA-1, page 693).

Q. PLEASE EXPLAIN YOUR CONCERN WITH THE LEVEL OF CHANGE IN INTERIM IOWA SURVIVOR CURVES BETWEEN STUDIES.

A. When values such as interim retirements change by unexpected magnitude from study to study performed by the same consulting firm, significant and meaningful substantiation is normally expected. Mr. Allis has developed and/or sponsored FPL's truncated Iowa Survivor curve recommendations for interim retirement purposes in both studies. Mr. Allis has not raised concern or explained in detail why credence should be granted to a process that for example proposed a 25R5 life-curve combination for Account 341 – Combined Cycle Structures and Improvements in the last case, but now proposes an 80R2 life-curve combination. (See Exhibit CRC-1 page 129 in Docket No. 080677-EI and Exhibit NWA-1 page 35). A more than tripling of ASL (80/25=3.2), especially when coupled with a change from an R5 (the highest peaked R Iowa Survivor curve) to a R2 Iowa Survivor curve, is difficult to fathom from study to study.

Moreover, this is not an isolated occurrence. This type of volatility between studies by itself is reason enough to suspend the consideration of interim retirements in the rate calculation process as is done in some other jurisdictions.

Q. PLEASE EXPLAIN YOUR CONCERN WITH THE LEVEL OF CHANGE IN LIFE SPANS IN BETWEEN STUDIES.

A. As previously noted, interim retirements are considered a fine tuning mechanism to the life span process. The need, desire, consideration, etc. to fine tune a value that is unstable or in a transient mode is more than questionable. The application of interim retirements is more realistic and appropriate when the life spans for generating units are more stable or predictable with greater certainty. The life spans for most of the Company's generating units are more subject to change now than for many periods in the past. Indeed, I am recommending a lengthening of the life span for FPL's combined cycle generation fleet, and I am strongly considering other life extensions, but will wait till the next study to make a final decision.

Q. PLEASE EXPLAIN YOUR CONCERN REGARDING THE CHANGE IN HISTORICAL DATA BETWEEN STUDIES.

A. Normally, historical data is supplemented for additional new years of data subsequent to the prior study. Normally, if historical data was recorded incorrectly in one period it is corrected in a subsequent year. In theory, the original cost for a vintage at a given generating unit can only stay the same or decline as time passes, but it does not increase after the fact. That is not the case with many historical data relied upon by Mr. Allis

for his interim retirement database. For example, the original cost for both 2001 and 2007 increased between studies for Account 343 Prime Movers – Capital Spare Parts at Lauderdale Unit 4. (See Exhibit CRC-1 page 303 in Docket No. 080677-EI and Exhibit NWA-1 page 522). The same thing happened at the Ft. Myers Unit 2, but for many more vintages. (See Exhibit CRC-1 page 316 in Docket No. 080677-EI and Exhibit NWA-1 page 524). There are other such occurrences. Again, this type of presentation is a forceful argument in favor of the suspension of interim retirement recognition all together.

Q. ARE YOU RECOMMENDING THAT INTERIM RETIREMENTS NOT BE REFLECTED IN THE CALCULATION OF PRODUCTION PLANT DEPRECIATION RATES?

A. No, although the facts in this case might warrant such action. While the Commission would be well within appropriate and acceptable bounds to deny the recognition of all interim retirements in this case, I am recommending an alternative. That alternative is to retain the existing interim retirement ratios established by the Commission in the prior case, with one exception. That one exception reinstates a single interim retirement rate for Account 343 – Prime Movers. Moreover, by retaining the interim retirement ratio approach and again denying the use of truncated interim retirement Iowa survivor curves, the Commission eliminates one of FPL's more unreasonable aggressive depreciation tools from consideration.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION TO RETAIN, FOR THE MOST PART, THE LEVEL OF INTERIM RETIREMENTS ADOPTED BY THE COMMISSION IN THE LAST CASE?

A. Retention of the existing interim retirement ratios, after reversing the separation of Account 343, on a standalone basis results in a $165.6 million reduction to depreciation expense.

SECTION VII: MASS PROPERTY LIFE ANALYSIS

D. Introduction

Q. WHAT IS THE PURPOSE OF THE LIFE PORTION OF A DEPRECIATION ANALYSIS?

A. The life portion of a depreciation study consists of two phases. The first phase is the life analysis phase and the second phase is the life estimation phase. The purpose of a life analysis phase is to analyze historical data to determine the best "average service life" or ASL, and corresponding dispersion pattern for each account or subaccount. The purpose of a life estimation phase is to blend all available information with the results of the life analysis phase to determine whether the historical indications are valid predictors of the future for the current investment. The ultimately determined ASL and Iowa Survivor curve or life-curve combination applied to the current plant in service produces both a remaining life and a theoretical reserve. This information is necessary to properly perform the depreciation calculation. A longer ASL with the same dispersion pattern results in a longer remaining life and therefore a lower depreciation expense. Alternatively, a shorter ASL with the same dispersion pattern will reduce the

remaining life and increase depreciation expense. The dispersion pattern is important, as it is critical in the overall selection process of the best fitting results. The same ASL with different Iowa Survivor curves also results in different remaining lives and theoretical reserves, due to the remaining expected pattern of retirements.

Q. WHAT ARE THE MAIN TOOLS UTILIZED IN PERFORMING LIFE ANALYSIS?

A. Life analysis is normally performed through the use of actuarial or semi-actuarial analyses. Actuarial analyses rely on aged data. In other words, when an item of property is retired, the age at retirement is known. This is the type of analysis performed by insurance companies when developing life tables in order to establish premiums. Semi-actuarial analyses are performed in instances in which the age of retired plant is not known.

Q. PLEASE PROVIDE MORE INFORMATION REGARDING HOW A DEPRECIATION ANALYST PERFORMS SUCH A LIFE ANALYSIS THAT RELIES ON AN ACTUARIAL APPROACH.

A. Aged data is gathered and analyzed. Aged data means that when an asset retires in 2014 we know that it originally went in service in 1974, and was 40 years old at the time of retirement. When all the aged data in a group is statistically analyzed by actuarial techniques, a resulting Observed Life Table or OLT is developed that depicts the rate of retirement over the life of the group. The OLT starts at 100% surviving and declines from there as each year of age is obtained and retirements occur. Naturally,

not all units retire at once; instead, the retirement dates are dispersed through time, creating a "dispersion pattern." In order to permit testing of the results, some standard or index must be used. The principal tool that a depreciation analyst uses for this aspect of the study is a set of "survivor curves." The industry standard and most extensively used curves are called the Iowa Survivor Curves. The name is derived from the fact that they were developed at Iowa State College in the 1930s.

Most often, and as is the case for many of FPL accounts, the data base analyzed does not yield a complete OLT, one that fully declines to 0% surviving. This means that the data set will produce an incomplete OLT or a "stub curve." Also, the limited data base may include atypical or abnormal events not reasonably anticipated to occur again during the remaining life.

The Iowa Survivor Curves are based on empirical studies of retirement "behavior" of physical property. They are designed to predict the retirement patterns of the property under study based on detailed past observations. The Iowa Survivor Curves make the calculation of the average service life far more manageable and comparable; instead of making and weighting a myriad of individual calculations that include each data point in the universe, the analyst measures the area below the curve and uses an established equation or standard curve to "solve" for the average service life. And, even if the data set is incomplete—which is often the case —by properly choosing a closely fitting curve to the known data, the analyst can better predict the behavior of the entire universe and calculate the average service life with reasonable statistical accuracy, if a

meaningful “stub curve” exists. The results of any estimation are more reliable if 70% of an OLT is known and only 30% must be assumed, than if only 10% of the OLT is known and 90% must be assumed.

Not surprisingly, choosing the survivor curve that provides the best fit to the data is critical to the accuracy of the analysis. When fitting the curves to the OLT in the life analysis phase of a study the analyst must bear in mind that some data points -- those that occur on the points of the graph that reflect the significant level of plant exposed to retirement events -- are more important to the determination of the ASL and dispersion pattern than those data points with limited levels of plant exposed to retirement events.

Further, the analyst cannot use the curves in isolation of other considerations. In the life estimation phase of a study, the analyst must incorporate such things as knowledge of the nature of the property being studied, an understanding of the causes of unusual events, recognition of changes or trends, and the results of the judgment process when using the curves. Also, the nature of survivor curves limits their usefulness. For instance, they are best suited to studies of homogeneous items that, because of their physical similarity and common exposure to retirement forces, can be expected to share common retirement characteristics. (By analogy: When an insurance actuary performs a mortality/longevity study for life insurance purposes, the actuary does not combine people and horses in the universe of data.) It is for that reason that I criticize FPL’s analyst for inappropriately applying the Iowa Survivor Curves to interim retirements

for generation plant, or for not properly investigating the mix of investment to the mix of retirements for mass property accounts such as station equipment. The items of generation plant involved in interim retirements frequently are far from homogeneous. Also, the lack of annual retirements of large dollar assets such as transformers, which have long lives, must be recognized in station equipment accounts so that the retirement of small dollar and short lived lighting arrestors and switches do not skew the life selection.

Q. HAVE YOU REVIEWED THE COMPANY'S LIFE ANALYSES?

A. Yes, I have reviewed the Company's life analyses. The main problem with the analyses is that Mr. Allis often proposes ASLs with corresponding Iowa Survivor curves that are <u>not</u> the best fitting results for the actuarial analyses, even when the final proposal established in the life estimation phase of the study is based on actuarial results. Mr. Allis' selections for most accounts reflect a bias toward artificially short ASLs, which continues the practice employed in the past several studies. It is unreasonable and inappropriate to ignore the best fitting life analyses without detailed and credible explanations. Mr. Allis fails to provide support for his questionable practice, is not always consistent in his process, and often ignores critical information that would result in the selection of a more representative and longer ASL.

Of particular concern is Mr. Allis' use of the word "judgment" as an answer to how he determined most values contained in the depreciation request. However, judgment is a process, not an answer or justification. A judgment process relies on various factors or

inputs in order to focus various components into a final result. While Mr. Allis does identify “factors” considered in his judgmental process, simply referencing statistical analyses of historical data, generalized information obtained from Company personnel, or review of the existing depreciation parameters provides very little transparency or clarity to the word “judgment”.

While I am aware the Company has a burden of proof that it must meet in support of its request, its failure to provide meaningful or significant items of information and failure to often provide even the rudiments of “connecting the dots” as to how such information was utilized in order to determine the final results cannot be considered adequate evidence in support of its request. Regulatory commissions would not accept a return on equity request by a utility simply based on the word “judgment” presented by a return on equity witness. Even if the return on equity witness expanded the basis by claiming to have reviewed what other companies propose, but never identifying the other companies let alone the criteria for claiming the companies were comparable, it would still not be acceptable. Nor would claims by the return on equity witness, that discussions were held with Company personnel in order to confirm that the proposed return on equity value was reasonable and appropriate, rise to the level of being an acceptable approach to meeting the utility’s burden of proof on that issue. The same expectations as to essential elements of proof should apply to the depreciation issue.

Q. PLEASE EXPLAIN YOUR STATEMENT THAT MR. ALLIS IS CONTINUING THE BIAS REFLECTED IN PRIOR STUDIES OF PROPOSING ARTIFICIALLY SHORT ASLS.

A. While performing my review I could not help but notice that the ASLs proposed by FPL in this and prior cases often reflect values that are striking low in comparison to what I have experienced for the most part elsewhere. For example, prior to the last depreciation study FPL relied on a 45R5 life-curve combination for Account 354 - Transmission Towers and Fixtures. (See CRC-1, page 510 in Docket No. 080677-EI). While a 45-year ASL for transmission towers would be an "eye-catcher" as too short to an experienced depreciation analyst, Gannett Fleming actually proposed to lower it to 40 years in the last study. (See CRC-1, page 510 in Docket No. 080677-EI). The Commission wisely did not allow such unrealistic proposal and adopted a 52R5 life-curve combination. Yet, even a 52-year ASL would still "raise an eyebrow" to an experienced depreciation analyst. Indeed, Gannett Fleming's internal industry data base identifies a 65-year mean, medium and mode value for this account. (See Gannett Fleming's industry data provided in response to CEP 6-2 in Docket No. 44941 before the Public Utilities Commission of Texas). Moreover, the Gannett Fleming database identified only one value less than 50 years and that value was for the ASL proposed for FPL in the last study, the one the Commission did not adopt. Of the remaining values, only 7% were as low as the 52-year ASL adopted by the Commission.

In this case, Gannett Fleming now proposes a 60-year ASL. (See NWA-1, page 711). This means in the seven years between depreciation studies Gannett Fleming has increased the ASL by 20 years or 50% (60-40=20, 20/40=50%). Movement of this magnitude over such a very short period of time by the same entity is basically unheard of. In reality, this movement is an unofficial tacit acknowledgement of the artificially low starting point. While Mr. Allis' current proposal removes it from the "eye-catcher" category, it is still on the low side of the industry, with only 16% of utilities in Gannett Fleming's internal database having a lower ASL value than 60 years. Given the tacit admission of prior understatement of ASLs coupled with the continued practice of proposing what on the surface still appears to be artificially low ASLs in this case, it is essential that something more than the word "judgment" or unsubstantiated generalized statements from Company personnel be required for FPL to meet its burden of proof for its various proposals. As discussed in greater detail later, this "something more" is absent from the case as presented.

Q. BASED ON YOUR REVIEW OF THE COMPANY'S LIFE ANALYSES, ARE YOU RECOMMENDING ADJUSTMENTS?

A. Yes. I recommend adjustments to 14 accounts or subaccounts. The recommendations, as well as the Company's proposals for each of the accounts where a change is recommended, are set forth in the following table.

Summary of OPC's Recommended Mass Property Life Adjustments

Account	FPL Proposed	OPC Proposed	OPC Adjustment	Impact
350.2	75S4	100R4	25	$1,024,767
353	40R1	44L1	4	$4,805,285
353.1	30R1	38R1	8	$3,685,141
354	60R4	70R4	10	$1,341,842
355	50R2	55S0	5	$5,024,286
356	51R1	55S0	4	$2,053,816
362	45R1.5	48S0.5	3	$3,189,707
364.1	40R2	44R2.5	4	$6,213,541
364.2	50R1.5	56S0	6	$4,281,779
365	48R1	53R1	5	$9,047,446
367.6	42S0	46L0.5	4	$5,916,659
367.7	35R2	45L1	10	$7,848,266
373	35O1	39L0	4	$1,707,755
392.3	12S3	13S3	1	$1,738,601
Total				**$57,878,890**

The combined impact of the various adjustments I recommend result in a standalone impact of a $57,878,890 reduction to annual depreciation expense. In addition, the various adjustments increase the reserve surplus for mass property accounts by $472,736,255. The bases for my recommendations are set forth in the following account specific discussions.

E. Account Specific

Account 350.2 – Transmission Easements (Existing: 75S4, FPL: 75S4, OPC: 100R4)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 350.2 – TRANSMISSION EASEMENTS?

A. The Company proposes to retain the current authorized 75-year ASL and S4 Iowa Survivor curve. (See Exhibit NWA-1, page 704).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company position is that the "historical data does not provide support for modifying the 75-S4 estimate that the Commission ordered." (See Exhibit NWA-1, page 704).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. Easements for new transmission lines are difficult to obtain. The "not in my back yard" ("NIMB") syndrome is stronger than ever in most locations. Therefore, utilities will continue to rely on existing transmission easements in the future, absent unusual circumstances. I recommend a 100R4 life-curve combination.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION??

A. I base my recommendation on several considerations. First, the Company "practice is to obtain perpetual rights easements (no expiration) everywhere they are available." (See OPC's First Interrogatories No. 68). The reason FPL and other utilities seek perpetual rights is in recognition that the transmission facilities that reside on or utilize the right of ways will be needed for as long as customers require service. Given that there is no expectation that physical connections between the generation sources and the distribution system will no longer be required in order to provide service long into the future, a land right must be in place for a period longer than one maximum life cycle of the equipment that resides upon or utilizes it. In other words, if the maximum life for any vintage addition of Overhead Conductors and Devices (Account 356) that are located on such easements is over 90 years, then logic dictates that the easement

must be in place for that period of time for all vintage additions. This particular concept is very conservative, given that the Company will be replacing or upgrading transmission investment as time passes, while still utilizing the same easements that it currently has in place, just as it has done historically. (See Exhibit NWA-1, pages 569-569).

Another consideration for a 100-year life or longer is the empirical information gained during the seven-year period since the last depreciation study. The OLT in this case now extends beyond age 70, or to at least age 62 -- the point at which Mr. Allis states there are only minor exposures thereafter, with essentially no retirement activity. (See Exhibit NWA-1, pages 201-203 and OPC's First Interrogatories Nos. 205-206). While I agree with Mr. Allis when he states that the "historical data does not provide conclusive results" or that "the historical data therefore should not be expected to provide definitive indications of service life for this account", those are neither necessary nor the issue to be addressed. (See OPC's First Interrogatories Nos. 205-206). The historical data is to be relied upon to the extent it is predictive of future expectations. In this case, the clear indication from the historical data is that a very long life is to be expected, which is completely in synch with the fact that basically all land rights are perpetual in nature. Of course the historical data does not definitively identify that the life for perpetual land rights at 152.5 years, or 132.5 years or any other definitive value, but it does demonstrate that 75 years is going to be short. Indeed, given that it would require significant levels of retirements during the next 13 years (75 years FPL proposed minus 62 years last significant age) for the meaningful portion of the

OLT to decline to the 50% surviving, which corresponds to the indication of the Company's proposal, and there is no basis or indication of such unusual activity, then a 75-year expectation is unrealistic.

Another area of support for a longer ASL in this case is Mr. Allis' admission that the industry as he views it has greatly lengthened the life expectation for this account. In the last study, the Company stated that "industry data suggests a service life between 40 and 60 years." (See Exhibit CRC-1, page 481 in Docket No. 080677-EI). Now Mr. Allis states that "typical average lives in the industry for this account are in the 60-80 year range." (See Exhibit NWA-1, page 704). In other words, in a very short period of time even Gannett Fleming recognized that the industry has increased the life expectancy for this account by 20 years or as much as 50%. In reality, the industry is actually moving to 100 years and most like will be expanding beyond that level in the future. For example, Public Service Company of Colorado proposed a 100-year ASL for land rights in its recent depreciation study. (Public Utilities Commission of Colorado Docket No. 14AL-0660E).

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a $1,024,767 reduction to annual depreciation expense.

Account 353 – Transmission Station Equipment (Existing: 40R1.5, FPL: 40R1, OPC: 44L1)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353 – TRANSMISSION STATION EQUIPMENT?

A. The Company proposed a 40 R1 life-curve combination. (See Exhibit NWA-1, page 708).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company performed actuarial analyses and asserts that its interpretation of the results in "a very good fit of the historical data. This estimate also takes into consideration information provided by FPL personnel and experience of the industry." (See Exhibit NWA-1, page 708). The information provided by Company personnel is: (1) that transformer and breakers "have a design life of 30 to 35 years, (2) if such equipment is "operated at lower capacity the equipment can last as long as 50 years", (3) "newer transformers may not last as long as the older ones due to tighter design tolerances", (4) environmental and climate issues applicable to FPL "all have an impact on the service life", and (5) the shorter life associated with tighter design tolerances "could be offset by predictive maintenance and other programs". (See Exhibit NWA-1, pages 707-708). Mr. Allis then concludes that the life and curve is consistent with estimates for other utilities for this type of property, and although it is on the lower end of the range this should be expected." (See Exhibit NWA-1, pages 707-708).

Q. DO YOU AGREE WITH THE COMPANY PROPOSAL?

A. No. After review of the actuarial analyses, investment components, and industry data it is clear that the Company's proposal is inaccurate and inadequate. Therefore, I recommend a 44-year ASL with a corresponding L1 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. The Company underestimates the appropriate interpretation of the results of its actuarial analysis. On an initial review, the Company's proposed 40R1 life-curve combination fit of the actuarial analysis might appear to the lay person be a good statistical fit. As shown in the graph below, my recommendation for a 44L1 life-curve combination is a similar, but superior fit to the meaningful portion of the OLT as presented. My reference to "as presented" has particular importance in this instance given admissions through discovery regarding the inclusion of an atypical event and results of actuarial analyses.

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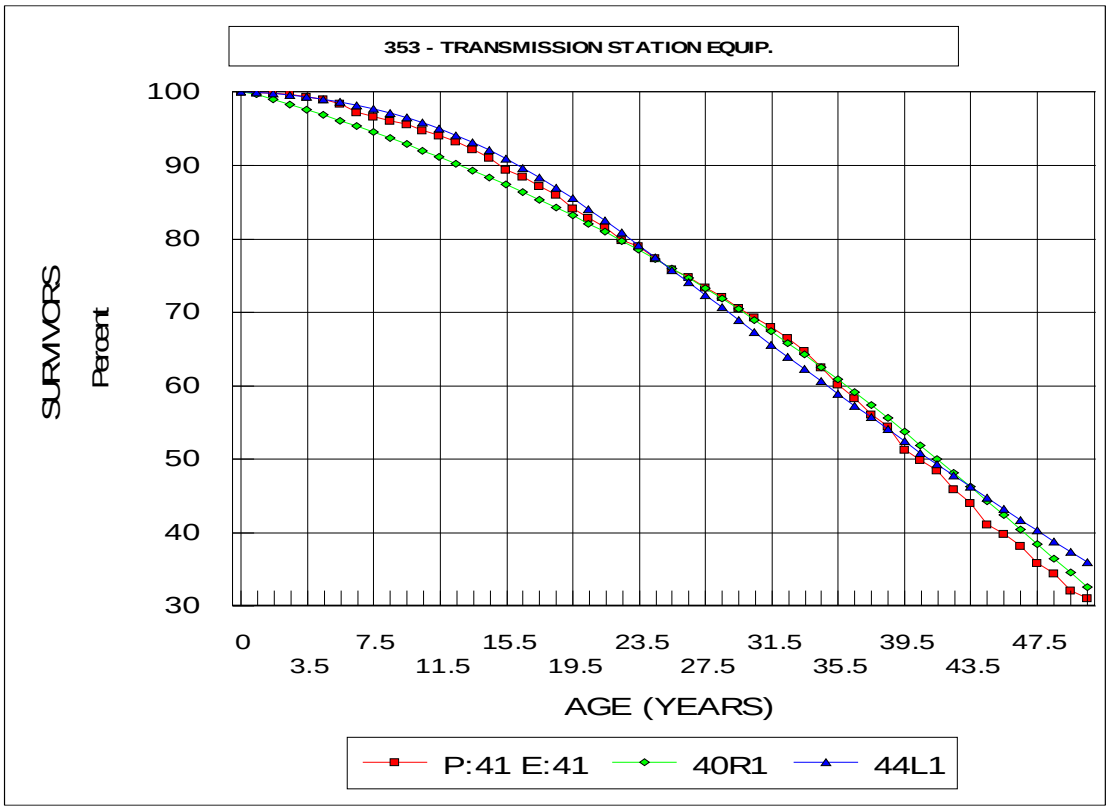


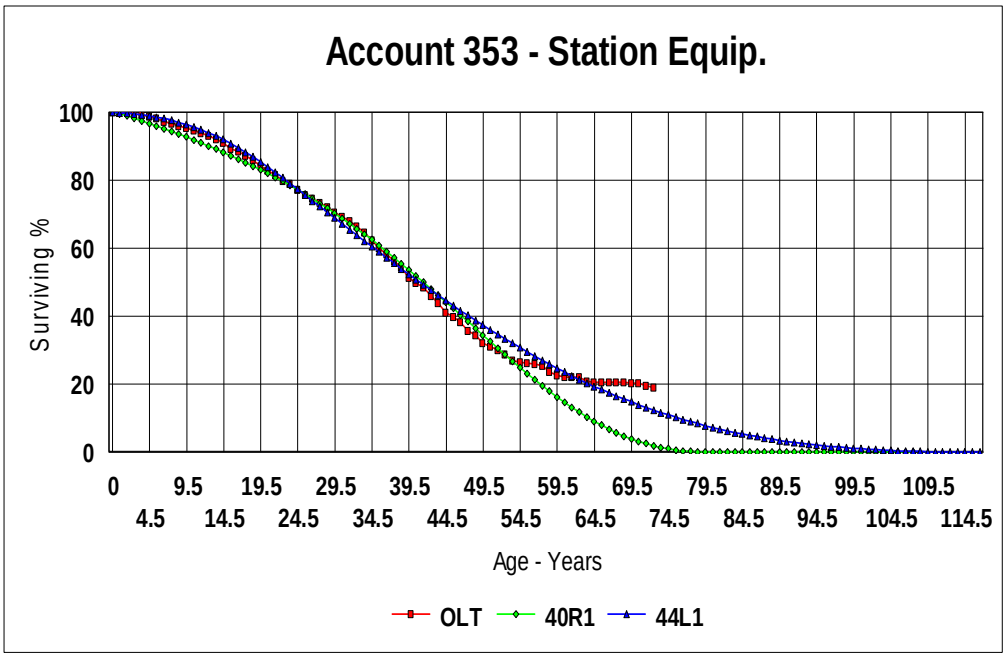
First, Mr. Allis stated in discovery that a major retirement occurred at age 5.5, which he "considered to be likely to reoccur at a lower rate in the future than has been the case historically." (See OPC's Eighth Interrogatories No. 213(e)). Mr. Allis further claimed that he did consider the atypical retirement in estimating his life proposal, but that the transactions "did not have a significant impact on the original life table." (See OPC's Eighth Interrogatories No. 213(e)). The appropriate "consideration" for this event is to recognize that any form of normalization of the atypical early retirement of transformers elevates the OLT "as presented" in Mr. Allis' study. An elevated OLT normally corresponds to a longer ASL. In addition, it must be noted that any elevation of the OLT would make Mr. Allis' proposal a poorer fit and my recommendation a more superior fit.

A second consideration that impacts the proper interpretation of the actuarial results in the curve fitting process for this account is recognition that many transformers were retired early in the past due to the recognition of the carcinogenic aspect of polychlorinated biphenyl ("PCB") used in transformers. The correction or normalization of the impact of this atypical situation would again elevate the OLT. Mr. Allis failed to consider this issue in his curve fitting process, and I cannot empirically remove PCB related retirements from the historical data since FPL does not maintain such information. (See OPC's Eighth Interrogatories No. 213(e)).

Yet another major consideration that impacts the proper interpretation of the actuarial results in the curve fitting process for this account is recognition of the noticeable variance in the types of investments in this account. Indeed, while transformers comprise approximately 25% of the investment in this account (See OPC's First Interrogatories No. 54 Attachment 1), as expected, the retirement of these long-lived assets are significantly underrepresented in the actuarial analyses. (See OPC's First Interrogatories No. 70 Attachment 1). The dollar level of transformer-related retirements during 2006 through 2014 is less than half the level corresponding to its investment level in this account. Mr. Allis' failure to investigate and recognize this situation led him to incorrectly understate the appropriate life for this account.

A second aspect of Mr. Allis' failure to properly interpret the actuarial results relating to the noticeable variance in the types of investments in this account is that the retirement of short-lived assets will distort and understate the ASL. For example, FPL identifies an investment in excess of $15 million for lightning arrestors for this account. (See OPC's First Interrogatories No. 54 Attachment 1). While FPL cannot identify the dollar level of annual retirement of lighting arrestors (See OPC's First Interrogatories No. 55 Attachment 1), logic dictates, and my experience with other utilities demonstrates, that the retirement of these and other short-lived assets are disproportionately reflected in the historical data. This information would again dictate that any matching of an Iowa Survivor curve to an OLT will result in an understatement of the overall realistic ASL.

Even if Mr. Allis were to dispute whether my recommendation was a superior match to the historical data, he could not challenge the fact that the two presentations are similar or relatively close to most of the data points as set forth in the graph above, disregarding the above noted issues. While I have magnified and presented the meaningful or significant portion of the OLT in the graph above, I present the full graph below in order to highlight the major differences between Mr. Allis' and my recommendations beyond the ages where historical retirements have transpired.



Given this situation, Mr. Allis surprisingly again failed to properly analyze the available facts. I state surprisingly, because Mr. Allis' superior at Gannett Fleming recently testified that when

> Each of the curves [competing recommendations] is a good fit of the historical data and is relatively close to most of the data points, determining the strictly "best" fit should not be the only consideration. In many cases a curve that is somewhat less of a good fit of the historical data may be the best estimate of future experience for the account.
> …
> I should emphasize that the goal of life estimation is to select the survivor curve that is the best estimate of the future retirement dispersion that will be experienced by plant currently in service.
> …
>
> That is, the biggest differences do not occur for the portion of the graph where the original data is plotted. Instead, the biggest difference between the curves occurs after the historical data plotted on the graph ends. Thus, the differences between these curves are

> the portions of the curves that are not based on historical data but instead are projections of the future experience for the account.

(See Mr. Spanos' rebuttal testimony in Massachusetts D.P.U. 14-150 Exhibit-JJS-R1 May 2, 2015 at pages 9-11).

When consideration is given to the expectation of the life of assets beyond the actual historical data, the life proposed by Mr. Allis is unrealistically short. The additional considerations referenced by Mr. Allis' supervisor are the increasing rate of retirement with age and the maximum life. (See Mr. Spanos' rebuttal testimony in Massachusetts D.P.U. 14-150 Exhibit-JJS-R1 May 2, 2015 at pages 9-15). As shown in the graph above, the rate of retirement with age increases for both proposals but at different rates. These differing rates of retirements result in noticeably different maximum lives. Mr. Allis' proposal yields a maximum life of approximately 81 years. Alternatively, my recommendation yields a maximum life of approximately 116 years or 35 years longer. Given that the investment in this account includes sizable dollar amounts in foundations, concrete poles, and other long-lived assets, a maximum life of only 81 years is unrealistic. The L1 Iowa dispersion pattern is indicative of the type and mix of investments in this account for FPL, even though it is not a common estimate for Gannett Fleming.

Q. DID YOU TAKE INTO ACCOUNT THE COMMENTS MADE BY FPL PERSONNEL NOTED BY MR. ALLIS AS PART OF THE BASES FOR HIS RECOMMENDATION?

A. Yes. First, the reference to a 30 to 35-year design life does not support a 40-year, 44-year or any other ASL for this account. Moreover, not only did the Company fail to

provide any support for the referenced design life, it actually provides evidence that such statement significantly understated the potential useful life of transformers. Indeed, FPL demonstrates that it has investment in transformers that exceed 74 years of service. (See OPC's First Interrogatories No. 69 Attachment 1).

Regarding the reference by Company personnel that if "operated at lower capacity the equipment can last as long as 50 years", once again the Company failed to provide any support for the reference. As noted above, actual evidence provided by FPL demonstrates that it has investment in transformers that exceed 74 years of service. (See OPC's First Interrogatories No. 69 Attachment 1). The value of this cryptic statement that is unsupported, and obviously less than accurate, helps explain why Mr. Allis' proposal is artificially short. Not only does FPL have a sizable level of investment in transformers that far exceeds the claimed design life, but it also has investments in transformers that have been in service for a period 50% longer than the implied maximum life of 50 years if it were operated at lower capacity. (See OPC's First Interrogatories No. 69 Attachment 1).

Regarding the reference by Company personnel that "newer transformers may not last as long as the older ones due to tighter design tolerances", such statement has been relied on by utility personnel for many decades. Yet again FPL provides no support for its conjecture. Yet again, industry and FPL specific transactions refute the implications of such claim. The ASL for this account has increased, not decreased, over the past few decades. At least Mr. Allis subtly attempted to downplay any meaningful reliance on

this statement when he admitted that the shorter life associated with tighter design tolerances "could be offset by predictive maintenance and other programs". (See Exhibit NWA-1, pages 707-708).

The final reference by Company personnel that environmental and climate issues applicable to FPL "all have an impact on the service life", is again meaningless in the context as to whether a 40-year or 44-year ASL is more appropriate. Moreover, over extended periods of time one would expect that good management would have investigated and implemented maintenance practices that address the environmental and climate issues applicable to FPL so as to minimize or eliminate their impact.

Q. PLEASE SUMMARIZE THE BASES FOR YOUR RECOMMENDATION?

A. Mr. Allis proposes one of the shortest ASL identifiable for the industry for this account. Rather than provide meaningful and significant substantiation and justification for such a material departure from the norm in his proposal, Mr. Allis presents a graphical depiction of what appears to be a reasonable curve match to the results of an actuarial analysis along with unsupported or unsubstantiated generalized statements that on the surface could be construed to lend the appearance of credibility to his proposal. However, when tested, each of Mr. Allis' bases for his proposal is shown to be too generalized at best and outright erroneous in most instances. Proper interpretation of actuarial results and a correct understanding of statements made by Company personnel demonstrate that while an ASL lower than the industry average may be appropriate, a value 20% to 25% lower than the industry average is excessive. Moreover, even my

recommendation for a 44L1 life-curve combination may be too short and too conservative, but it represents a step in the right direction.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $4,805,285 to annual depreciation expense.

Account 353.1 – Transmission Station Equipment – Step-Up Transformers (Existing: 35R2, FPL: 30R1, OPC: 38R1)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353.1 – TRANSMISSION STATION EQUIPMENT – STEP-UP TRANSFORMERS?

A. The Company proposes a 5-year reduction in ASL from 35 years to 30. The Company further proposes to change the existing R2 dispersion to an R1 dispersion. (See Exhibit NWA-1, page 710).

Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?

A. The Company performed actuarial analyses on its step-up transformer investment, and claims that the analyses "indicated shorter service lives." (See Exhibit NWA-1, page 710). Mr. Allis chose not to reduce the ASL to a value less than 30 years in recognition that "the number of power plants retired in the past fifteen years may be (on an average basis) higher than will occur over the full life cycle of the assets in this account." (See OPC's Eighth Interrogatories No. 216).

Q. DO YOU AGREE WITH THE COMPANY'S ANALYSES?

A. No. The Company's analyses are flawed and produce unrealistic results. Therefore, I recommend a conservative value of a 38R1 life-curve combination.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on recognition of both the type of asset at issue for this subaccount as well as the key driver of useful life. The type of assets at issue is transformers. The key driver of useful life for these particular transformers is the life span of the generating units they are tied to. Unlike Mr. Allis, I did not inappropriately rely on the results of the historical life analyses as the basis for establishing an estimate of the future life expectancy for step-up transformers in the life estimation phase of a depreciation analyses.

Reliance on the results of historical data for this subaccount is not only illogical, but in particular, is inconsistent with the admission by Mr. Allis that "the number of power plants retired in the past fifteen years may be (on an average basis) higher than will occur over the full life cycle of the assets in this account." (See OPC's Eighth Interrogatories No. 216). The historical data reflects the early retirement of step-up transformers due to a major shift away from older and less efficient steam-fired generators to mainly the new combined cycle technology. Since the goal of depreciation analysis is to establish the best mortality estimates for existing plant into the future, unless Mr. Allis has information to share about, or is only expressing an

opinion about, another monumental change in technology for generation is on the horizon, reliance on the non-representative historical data is misguided at best.

My recommendation also recognizes the physical life characteristics of transformers. As previously noted under the discussion for Account 353, FPL has investment in transmission transformers that exceed 70 years, which is well beyond the maximum life proposed by Mr. Allis. While the physical life characteristics of transformers correspond to a long life expectation, my recommendation only relies on this information for just that: a physical limitation. As previously noted, the driving factor for this account is the life span applicable to the connected generation.

My recommendation further recognizes the realistic movement towards longer life spans for combined cycle units. FPL and Mr. Allis now recognize that the prior life spans proposed for combined cycle units were woefully understated. While Mr. Allis' support for a 40-year life span for combined cycle units represents progress, it is still insufficient. As noted elsewhere in my testimony, I am recommending a 45-year life span for combined cycle generation.

Finally, in recognition that some transformers will fail or be replaced prior to achieving the useful life of the generation to which they are connected, an ASL less than 45 years is appropriate at this time. Giving consideration to the concept of gradualism in conjunction with realistic life span and other retirement factor expectations, I

recommend a 38 year ASL rather than a 40 or 40-plus year ASL along with a R1 dispersion.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $3,685,141 to annual depreciation expense.

Account 354 – Transmission Towers (Existing: 52R5, FPL: 60R4, OPC: 70R4)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 354 – TRANSMISSION TOWERS AND FIXTURES?

A. The Company proposes a 60R4 life-curve combination. (See Exhibit NWA-1, page 711). This represents an 8-year increase from the Commission ordered ASL in the last case and a 15-year increase from what FPL and Gannett Fleming proposed in the last case. It must be noted that the Company's proposal in this case is identical to what I proposed in the last case.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company admits that this account exhibits "relatively few retirements", which caused the results of the actuarial analyses to be considered "inconclusive". (See Exhibit NWA-1, page 711). It then states that industry data "typically" ranges from 50 to 75-years. The Company also states that towers are retired due to rerouting or replacement of conductors upgraded for heavier duty, and due to foundation decay. (See Exhibit NWA-1, page 711).

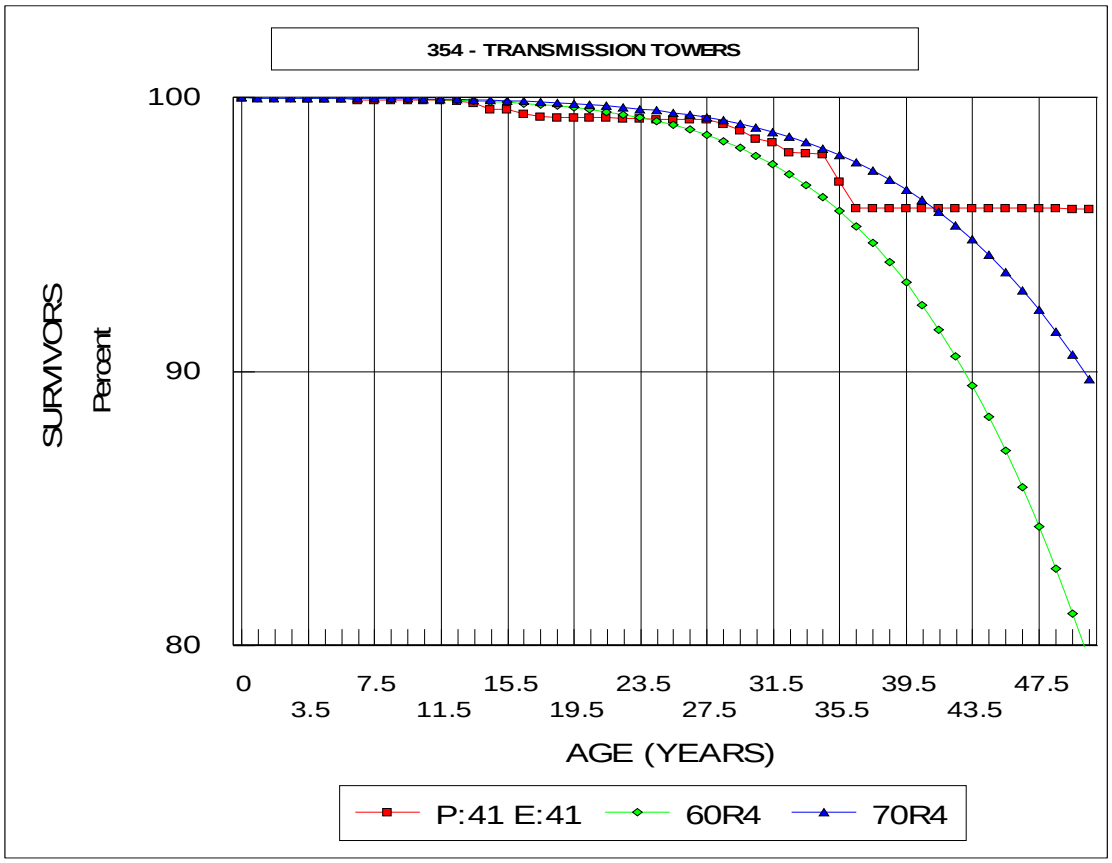
Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is a step in the right direction, but still short. I recommend a 70-year R4 life-curve combination. My recommendation is logically derived from Company specific data, and is also reflective of what Mr. Allis and his firm have recommended in other depreciation studies.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation is based on the type and mix of investment in this account, review of historical data, and industry expectations. First, the Company's investment reflects the fact that approximately 30% of the investment for this account is in foundations. (See OPC's First Interrogatories No. 54 Attachment 1). I do not recall another utility identifying that high of a level of investment in foundations for Transmission Towers. Foundations are normally assumed to have very long life expectations.

Next, the result of the actuarial analyses yields a stub curve that declines to only 87% surviving. (See Exhibit NWA-1, pages 213-215). However, given the type of investment, the historical period analyzed and the length of the OLT in terms of age, a very long life expectation for the investment in this account is reinforced. (See Exhibit NWA-1, pages 213-215). As shown in the following graph, my recommendation is more realistic than Mr. Allis' proposal.



Finally, given the limited level of decline in the OLT, it is also reasonable to test the reasonableness of the recommendation with industry information. First, it must be noted that Mr. Allis has recognized a significant increase in typical industry ranges since the last study. Mr. Allis' now finds a range of 50 to 75 years (See Exhibit NWA-1, page 711), while previously the range was only 40 to 70 years. (See Exhibit CRC-1, page 510 in Docket No. 080677-EI). Moreover, Gannett Fleming's mean, median and mode from a current database are 66, 65 and 70 years, respectively. In fact, 75% of values are longer than 60 years. (Gannet Fleming industry database in an ATCO Electric Application: ID 20272, before the Alberta Utilities Commission).

Therefore, given the mix of investment in this account, the results of actuarial analyses, supplemented with industry values, a 70R4 life-curve combination is appropriate.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $1,341,842 to annual depreciation expense.

Account 355 – Transmission Poles (Existing: 44R2, FPL: 50R2, OPC: 55S0)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 355 – TRANSMISSION POLES AND FIXTURES?

A. The Company proposes 50R2 life-curve combination. (See Exhibit NWA-1, page 713). This represents a 6-year increase from the existing ASL.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company recognizes that this account is undergoing a change from wood to concrete transmission poles. (See Exhibit NWA-1, page 713). It then states that a 46R2 life-curve combination is a very good fit of the historical data. However, Mr. Allis proposes a longer ASL based on the expectation that concrete poles will last longer than wood poles (See Exhibit NWA-1, page 711), and that concrete distribution poles "indicated an average service life of about 45 years or less." (See OPC's Eighth Interrogatories No. 218).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is a step in the right direction, but still short. I recommend a 55S0 life-curve combination.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. First, it must be recognized that there has been a dramatic change in the mix of investment in this account. Since 1998 the ratio of wood poles to concrete poles has reversed. As of the end of 2015, there are 57,700 concrete poles and only 29,490 wood poles on the system. (See OPC's First Interrogatory Number 76 Attachment No. 2). However, at the end of 1998 there were approximately only 33,000 concrete poles and approximately 48,000 wood poles. (See OPC's First Interrogatories Number 58 in Docket No. 090130-EI). This change in the mix of assets for this account over a short period of time is not adequately reflected in the historical data relied upon for actuarial analyses. Therefore, special care must be used for this account when attempting to interpret the results of actuarial analyses for its predictive properties.

Mr. Allis attempted to recognize the problem associated with the future predictive capability of the historical actuarial analyses by proposing an ASL that was longer than that indicated by the historical data. Mr. Allis' attempt to properly capture more realistic life characteristics for the current plant investment was unsuccessful. Even Mr. Allis's reliance on a comparison to distribution concrete poles is misguided.

Mr. Allis' reliance a comparison to distribution concrete poles is misguided given that the historical analyses he performed for distribution concrete poles incorporates the impact of the life characteristics of older concrete poles. However, Mr. Allis admits that the older concrete poles were not as strong as the current concrete poles. (See Exhibit NWA-1, pg.28). Moreover, Mr. Allis recommended a 50-year ASL for distribution concrete poles. More extensive experience in performing life analyses for transmission and distribution poles would have provided Mr. Allis a better indication that his expectation for transmission concrete poles was inadequate.

Q. WHAT IS THE MORE NORMAL SERVICE LIFE RELATIONSHIP BETWEEN TRANSMISSION AND DISTRIBUTION POLES?

A. Normally, the different impacts of various retirement forces on transmission poles versus distribution poles results in a longer service life for transmission poles. For example, transmission lines often do not follow a road or highway where electric poles run a greater risk of being hit by a vehicle. This situation and the impact of other retirement forces are normally captured by Gannett Fleming in other studies. Indeed, Gannett Fleming overwhelmingly recommends longer ASLs for transmission poles versus distribution poles for the same utility in a given case. In a recent industry survey of Gannett Fleming's recommendations, 54 out of 82 companies reporting values for both the standard transmission and distribution pole categories yield a nine-year longer ASL for transmission poles. (See Response AET-CCA-2015JUL10-009(a)(vii) Attachment 2 in Application 3527 before the Alberta Utilities Commission). Moreover, in the same survey, Gannett Fleming identified only five instances where it has

proposed a longer ASL for distribution poles than for transmission poles for the same utility. In other words, had Mr. Allis applied the same judgment for FPL that Gannett Fleming has overwhelmingly relied upon for other utilities, he would have found it more appropriate to increase the ASL for transmission poles to a value between 55 and 60 years rather than setting the ASL equal to his proposal for distribution concrete poles. This information gained over an extensive period of time is part of the informed judgment process I relied upon to gradually move to a more realistic life for the investment in this account.

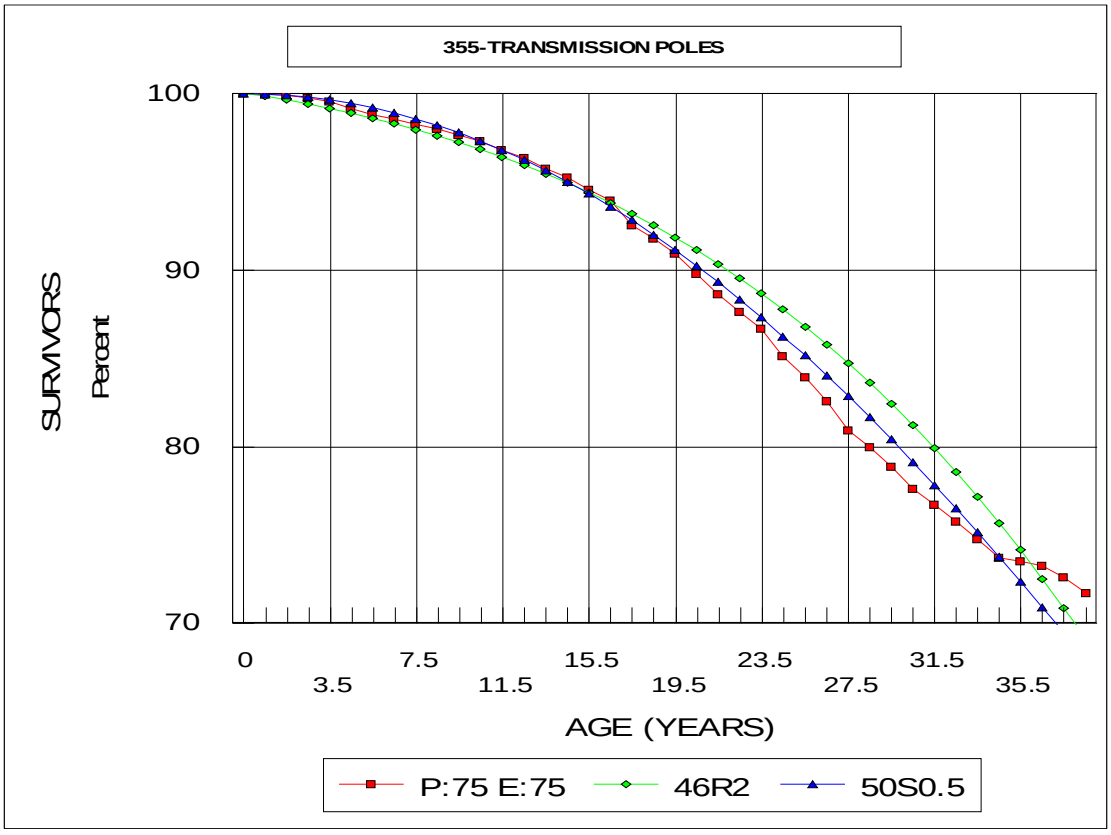
Q. IS YOUR RECOMMENDATION ALSO BASED ON A REVIEW OF THE COMPANY'S HISTORICAL DATA?

A. Yes. However, my analysis is of historical data more appropriately recognizes the change in investment between wood and concrete poles as well as the greater strength associated with more current concrete poles in comparison to older concrete poles.

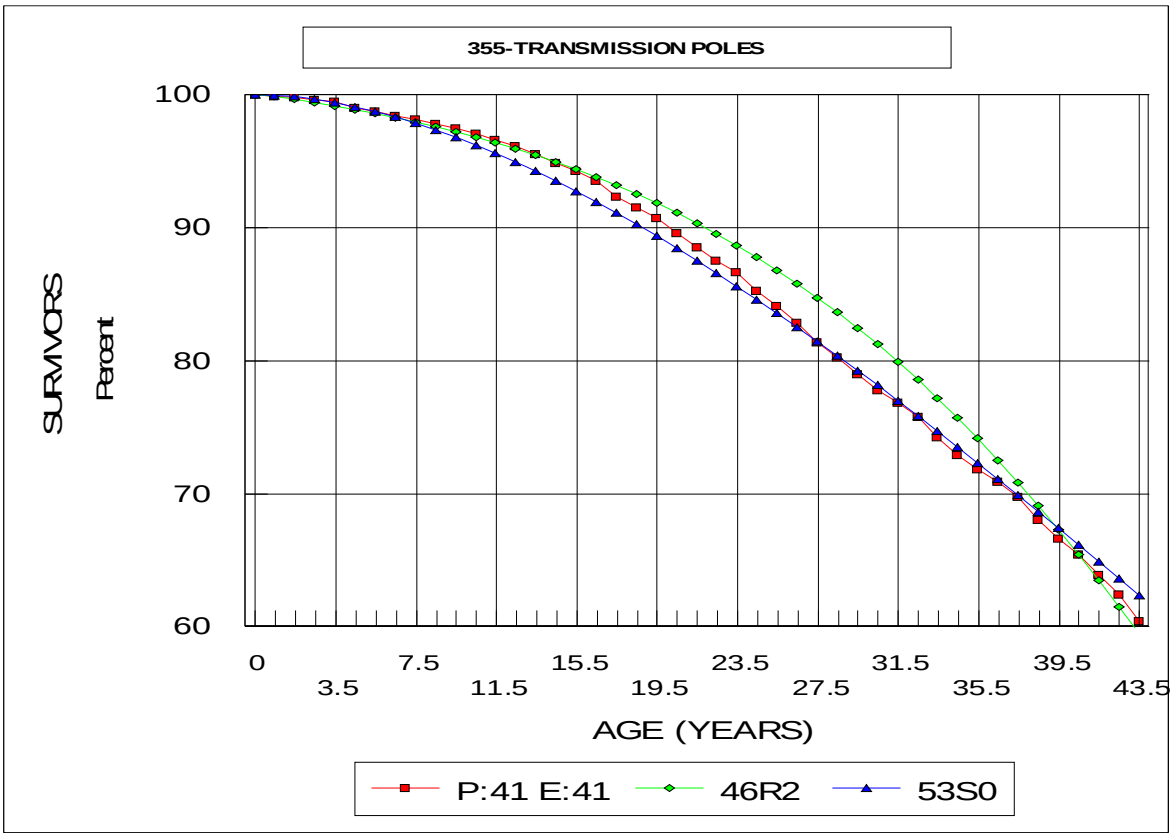
Mr. Allis shows inadequate use of the informed judgment process when he claims that a 46R2 is a very good fit of the historical data for this account. Mr. Allis' statement reflecting his informed judgment demonstrates why it is necessary to properly understand the life analysis process versus the life estimation process, and why the phrase "informed judgment" is meaningless unless its application is properly identified and supported. Adequate experience would have informed Mr. Allis that his "very good fit of the historical data" in this case fails to properly recognize that the historical data to which he fit the 46R2 life-curve combination has to be interpreted with the

understanding of the dramatic change in investment mix. Mr. Allis's statement would be more meaningful in support of a life estimate for poles if the historical data were homogeneous. In other words, Mr. Allis failed to properly recognize that the predictive nature of the historical data is more applicable to wood poles, not concrete poles.

More experience by Mr. Allis might have also lead him to realize that better fitting recommendations with a longer ASL also exist if one were to only rely on the results of the life analyses, not life estimation, process. As shown on the graph below, a 50S0.5 life-curve combination fits the meaningful portion of the historical data better than Mr. Allis's very good fitting 46R2 life-curve combination for a more current band analysis (1975-2014 for both placement and experience bands) that better captures the trend in the data.



In addition, even when the full band is analyzed in the life analysis process, a longer ASL is also warranted based on the portion of the data that does not go far beyond the period prior to the development of stronger concrete poles. The overall band analysis is set forth below.



While the balance of the OLT beyond age 43 will reflect a better fit to a 46R2 life-curve combination, good judgment in both the life analysis and estimation phases of a depreciation study would not allow a depreciation analyst to recognize such results. What is significant regarding the interpretation of the data is that the balance of the OLT is either reflective of wood poles or of the older concrete poles that are not as strong. In other words, those indications are not predictive of the life characteristics

corresponding to the vast majority of the investment in the account currently, which are the newer, stronger concrete poles. Therefore, even if only a life analysis of historical data were used as a proxy of the current investment, a 53S0 curve would still be a superior fit. However, even the 53-year ASL would not adequately capture the continuous movement towards concrete versus wood poles that the Company has undertaken in the last 20 years. Simply stated, Mr. Allis has not shown proper judgment when interpreting the historical actuarial results, especially as they should be utilized for predicting the life characteristics of the existing investment in the life estimation phase of a study.

Q. DID YOU TAKE INTO ACCOUNT THE HARSH ENVIRONMENT THAT MR. ALLIS NOTES CONCRETE POLES ARE SUBJECTED TO IN THE COMPANY'S SERVICE TERRITORY WHEN MAKING YOUR RECOMMENDATION?

A. Yes. The salt content of locations near to the ocean can cause chloride-related problems with unprotected or inappropriately produced concrete. One would expect that concrete poles installed in areas subject to chloride contamination from ocean-based salt sprays would be protected or formulated to minimize the impact of such deterioration considerations. In addition, the Company now performs pole inspections, which has not always been the situation. To the extent a real problem is identified through the pole inspection process, remediation efforts can be implemented in order to continue to prolong the life of such costly investment. It is significant to note that Mr. Allis only referenced the harsher salt environment without providing any empirical studies or

evidence to demonstrate that, in fact, such statements have been demonstrated to be a significant retirement force for the Company's investment in newer concrete poles. Indeed, if there is a specific and meaningful concern associated with such retirement force, then the prudence of installing such large amounts of investment in a type of pole that cannot withstand the environment it is being placed in would call into question prudent operation of the system.

Q. FROM A CONFIRMATIONAL STANDPOINT, HAVE YOU FURTHER REVIEWED INDUSTRY INFORMATION ABOUT THIS ACCOUNT DIRECTLY APPLICABLE TO GANNETT FLEMING?

A. Yes.

Q. DOES YOUR RECOMMENDATION TAKE INTO ACCOUNT THAT THE EXISTING LIFE IS ONLY 44 YEARS FOR THIS ACCOUNT?

A. Yes. While Mr. Allis places significance in the fact that his proposal already reflects an increase of six years from the existing ASL, such consideration again is inappropriate. First, it must be noted that the industry ASL presented by Gannett Fleming in the last depreciation study was between 30 and 50 years. (Exhibit CRC-1 at page 515 in Docket No. 080677-EI). In addition, Gannett Fleming chose to only state that many of the poles in FP&L's system were concrete. (Exhibit CRC-1 at page 515 in Docket No. 080677-EI). Had Gannett Fleming properly identified the significant change that was already underway to concrete poles, a longer service life would have been recommended in the last proceeding. However, we now know that the 44-year

existing ASL is inadequate today and most likely was inadequate at the time of the last study. Therefore, any attempt to limit the level of increase to only six years as proposed by Mr. Allis based on a claim that anything greater than that would represent too great of a change from the existing rate is inappropriate and continues the Company's efforts to ignore reality of the change in mix of assets in this account.

In addition, review of Gannett Fleming's industry database identifies a mean, median, and mode value of approximately 55 years for the investment in this account. (See Response AET-CCA-2015JUL10-009(a)(vii) Attachment 2 in Application 3524 before the Alberta Utilities Commission). This 55-year average exceeds the high end of the typical industry range Gannett Fleming claimed existed during the last study. Therefore, whether Gannett Fleming underreported the typical range in the last study or the industry has come to recognize the longer service life for transmission poles, the fact remains that Mr. Allis's proposed movement to 50 years is artificially low and requires further expansion.

Q. PLEASE SUMMARIZE THE BASIS FOR YOUR RECOMMENDATION.

A. My recommendation more appropriately captures the significant change in investment in this account. Indeed, the vast majority of the investment in this account is now associated with concrete poles, which Mr. Allis admits has a longer life expectancy than wood poles. In addition, the retirement forces applicable to transmission concrete poles compared to distribution concrete poles indicate a longer life is warranted for the investment in this account. Further, proper interpretation of the actuarial analysis based

on historical data that significantly over-reflects the retirement of wood pole still indicates a service life in excess of 50 years. The Company has not shown any logical or evidentiary-based information that would warrant such a short life, especially one not indicative of industry averages which are mainly comprised of wood and steel transmission poles, not concrete poles. Finally, the Company currently has in place a pole inspection program that should identify retirement forces that can, if possible, be corrected if identified on a timely basis, thus further extending the useful life expectation compared to historical activity. My recommendation for a 55-year ASL is conservative and most likely will need to be extended in the next study.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $5,024,286 reduction in annual depreciation expense.

Account 356 - Transmission Overhead Conductors and Devices (Existing: 47R1.5, FPL: 51R1, OPC: 55S0)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 356 – TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES?

A. The Company proposes an increase of four years in ASL from 47 to 51 years and a change from the existing R1.5 Iowa Survivor curve to an R1. (See Exhibit NWA-1, pages 715-716).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis states that actuarial analyses indicate that an increase in ASL is appropriate. He further notes that the R1 and S0 Iowa curves fit the historical data better than the R1.5 Iowa Survivor curve. Mr. Allis continues by noting that it is uncertain how and if the storm hardening program will impact conductors. The storm hardening program increases the structural strength of the transmission pole which the conductor resides upon. Mr. Allis speculates that, due to the stronger structures, "more force from storms and wind could be transferred to the conductor, resulting in more retirements due to deterioration and damage." (Emphasis added). (See Exhibit NWA-1, page 715). Mr. Allis continues by noting that many of the retirements of conductors occurred due to capacity and relocations and therefore the impact of the storm hardening could be limited. From these various statements, Mr. Allis concludes that "the statistical analysis is considered to be indicative of the future experience for this account." (See Exhibit NWA-1, page 715).

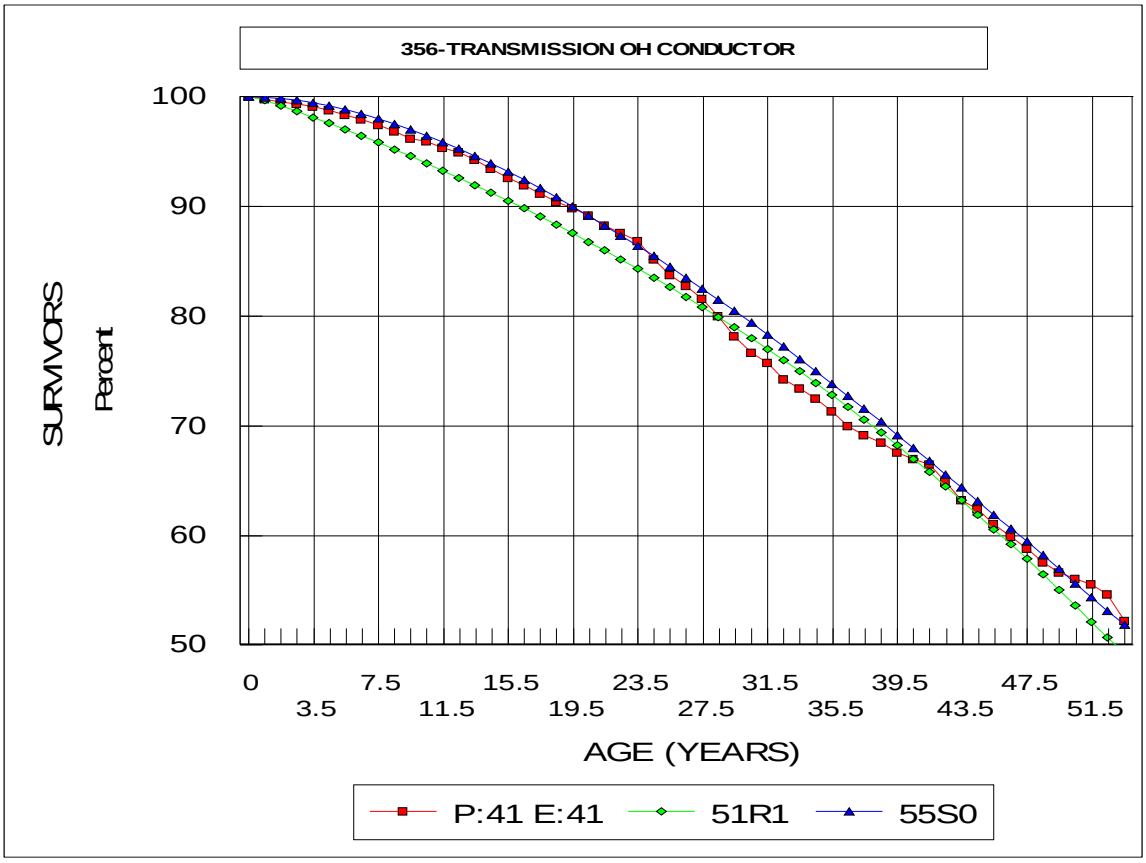
Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. While the Company's proposal is a movement in the right direction, it still falls short of appropriate interpretation of the historical data and proper life estimation. I recommend a 55S0 life-curve combination.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation also relies on interpretation of actuarial analysis of historical data, but better reflects the determination of life characteristics in the life estimation phase of the analyses.

As shown on the graph below, while both recommendations are similar, the 55S0 life-curve combination that I recommend is still superior. It is important to note that the 55S0 life-curve combination that I recommend is a superior choice prior to the life estimation phase of the analyses.



Turning to the life estimation phase of the analyses, the superior fit of the 55S0 is reinforced by several factors. Those factors include the pole inspection program, the addition of dampers to the system, the level of investment in 500kVA transmission lines, the storm hardening program, and the dollar level of exposures.

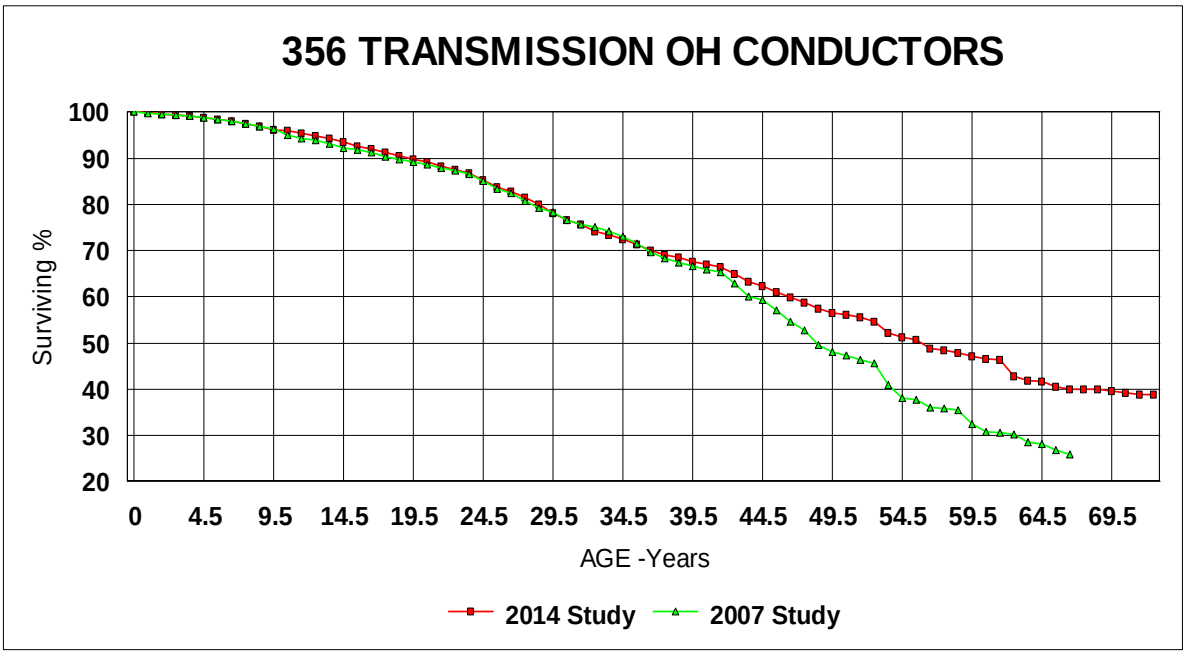
First, while Mr. Allis implies that the storm hardening program could transfer some of the forces of retirements from the pole to the conductor, the impact could more likely be the opposite. To the extent transmission poles were knocked down due to severe winds in the past, those events may also have resulted in retirement of transmission overhead conductors in certain instances. To the extent transmission towers and poles are now being constructed to withstand greater storm forces, then that particular aspect of retirements attributable to overhead conductors should also diminish since fewer towers and poles will be knocked over during storms.

Second, another consideration for a longer service life is Mr. Allis's failure to recognize the FPL already has a sizeable dollar level of investment in higher voltage transmission lines. As the system grows, the likelihood of low voltage lines being upgraded will continue to exist. However, the dollar level of investment in the lower voltage lines is a smaller proportion of the total system. Moreover, FPL has provided no indication that there are any potential plans to change out 500kVA lines for capacity purposes. Therefore, that particular force of retirement should diminish in the future in comparison to the past.

Another factor for further extending the ASL for this account is the fact that the Company has been adding dampers to the transmission system since 1974. (See OPC's Seventh Interrogatories No. 81). Dampers reduce the level of vibration that can result in failure of overhead conductors. The impact of dampers is not fully recognized in the historical data that was relied upon to produce the OLTs obtained from actuarial analyses. In the future, the addition of dampers will be reflected to a greater extent and should result in fewer retirements, which normally corresponds to a longer ASL.

Yet another factor supporting a further extension of the ASL, is the fact that the Company now has a pole inspection program in place. When Company personnel inspect transmission poles and towers, those same individuals will be viewing the conductor that resides on those structures. Therefore, to the extent conditions arise that may begin to shorten the life of conductors, they can be observed and addressed in a timely manner.

Finally, a review of the dollar level of exposures at different ages raises the probability that the middle to lower portion of the OLT will elevate in the future as it has in the past. As shown on the graph below, the current OLT is noticeably elevated from the OLT the Company presented in its last study for the age period beginning at approximately 44 years of age and continuing thereafter.



Indeed, by approximately age 54, there is over an 11 percentage point differential in the OLTs. The predominant cause of such change is the change in dollar level of exposures compared to the rate of change of retirements during identical age brackets. Moreover, a review of the dollar level of exposures from approximately age 30 and older indicates that absent significant levels of retirements at such ages in the next five to six years, the OLT will again elevate appreciably, further indicating an even longer ASL in future studies. (See Exhibit NWA-1, pages 220-221).

Therefore, whether viewed from the standpoint of a more appropriate interpretation of actual historical data points, or from proper recognition of the impact of the storm hardening program, or from the recognition of more experience with the Company's investment in dampers, or from the dollar mix of investment including 500kVA lines, or any other reasonably identifiable measure, a longer ASL than Mr. Allis proposed is

warranted. My recommendation for a 55-year ASL is conservative and most likely need to be extended further in the future.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $2,053,816 increase in annual depreciation expense.

Account 362 – Distribution Station Equipment (Existing: 43R1.5, FPL: 45R1.5, OPC: 48S0.5)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 362 – DISTRIBUTION STATION EQUIPMENT?

A. The Company proposes to increase the existing ASL from 43 years to 45 years, but retain the R1.5 Iowa Survivor Curve. (See Exhibit NWA-1, pages 725-726).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company performed actuarial analyses and recognized that the "data indicate a trend to a longer service life." Mr. Allis further asserts that his interpretation of the actuarial results in "a good fit of the historical data and represents the same curve type as the approved estimate." (See Exhibit NWA-1, page 726). Mr. Allis relied on other information as support for his proposal. Company personnel indicated that transformers and breakers "have a 30 to 35 year design life, but can have longer lives if operated at a lower capacity," "newer transformers may not last as long as the older ones due to tighter design tolerances," and "environmental and climate conditions in FPL's service territory, such as heat, rain, wind, lightening, and salt spray all have an impact on the

life of substation equipment". (See Exhibit NWA-1, page 725). While Mr. Allis noted that a 47S0.5 life-curve combination was also a very good fit to the data, it did not provide him with "a strong reason to modify the curve type from the existing R1.5." (See Exhibit NWA-1, page 726). Mr. Allis also noted that it is "possible that the future indications will be somewhat shorter than the historical data due to differences in design tolerances" as well as the fact that he only proposed a 40-year ASL for the comparable transmission account. (See Exhibit NWA-1, page 726).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is again artificially short and must be increased. I recommend a 48S0.5 life-curve combination.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

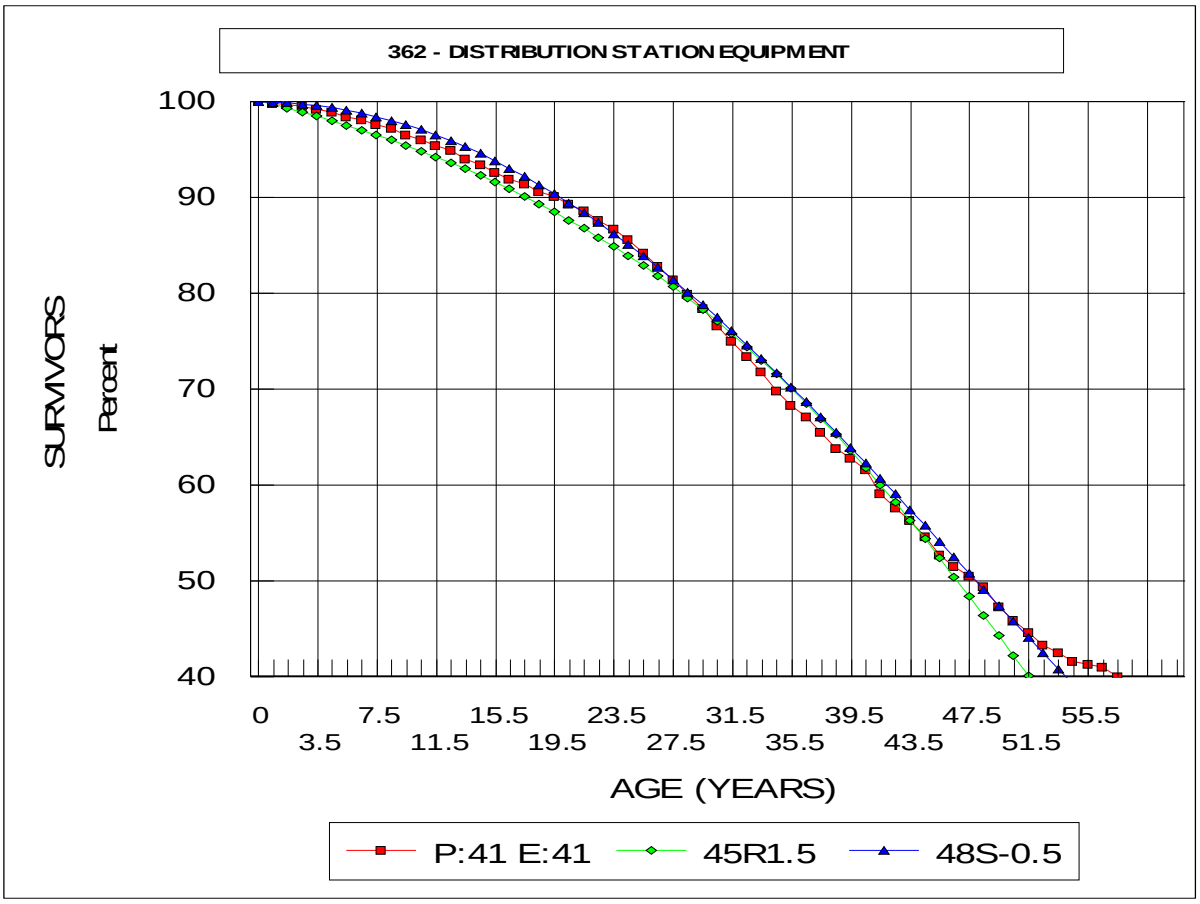
A. The bases for my recommendation reflect a more appropriate but conservative interpretation of the results of the actuarial analyses, actual consideration of the "trend to a longer service life" that exists (and which was noted by Mr. Allis), and takes into consideration the fact that long-lived transformers are significantly underrepresented in the measurable historical data. My recommendation does not give credence to the concept that someday a shorter ASL will finally appear due to differences in design tolerances that Mr. Allis alludes to, but which have not materialized for decades since this unfounded supposition was initially concocted as a potential basis to retain an artificially short ASL. Indeed, a member of Gannett Fleming admitted in recent testimony that "whatever downward effects of tighter tolerances that may exist are

more than offset by improved technology." (See the testimony of Mr. Kennedy in preceding ID: 20272 ATOC Electric Transmission Division General Tariff Application before the Alberta Utilities Commission).

From an actuarial analyses standpoint, while Mr. Allis' judgment was misdirected to a shorter ASL due to the above noted design tolerance red herring, my judgment was noticeably different. I recognized that the historical data contains retirement activity related to PCB contaminated assets, which no longer exist in current plant in the concentrations when first identified as a carcinogenetic. I investigated and identified that the investment in transformers is the largest single component of this account at 37% (See OPC's First Interrogatories No. 54 Attachment 1), but only represents 19% of the retirements over the past 10 years. (See OPC's Seventh Interrogatories No. 188). Both of these real issues have caused the OLTs analyzed to be artificially depressed. An experienced analyst would have given more consideration to the impact of these issues when interpreting the OLTs for their predictive indications of the future, rather than not knowing about or simply ignoring them.

Another basis for my recommendation is the recognition of a trend towards a longer ASL. Unlike Mr. Allis' unexplained failure to give consideration to a trend he recognized but for which he actually chose to assume the opposite, I relied on the trend to assist in the selection of a conservative recommendation. My recommendation is conservative as it incorporates the concept of gradualism rather than capturing the higher ASL associated with the trend in the data.

The above-noted considerations culminated in the selection in the life estimation phase of my analyses of the best fitting curve of the life analyses phase of my analyses. As shown in the graph below, a 48S0.5 is a similar but superior fit compared to Mr. Allis' proposed 45R1.5 life-curve combination.



Moreover, even if one were to consider the two selections being too close to call as to which is superior, the other factors or considerations noted above would more than tip the selection in favor of the longer ASL. Indeed, Mr. Allis found it necessary to attempt to create a new standard for selection to justify his proposal. Rather than give any consideration to the trend towards a longer life he identified, Mr. Allis chose to rely on a nonstandard concept or what could be called his new judgmental concept that the

better fitting curve with a longer ASL did "not provide a strong reason to modify the curve type from the existing R1.5." This concept does not demonstrate good judgment.

Finally, like Mr. Allis I also gave some consideration to the estimate for Account 353 Transmission Station Equipment. As noted previously, Mr. Allis understated the appropriate life for that account also. Moreover, most if not all the reasons cited for a longer ASL for Account 353 also apply here.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $3,189,707 to annual depreciation expense.

Account 364.1 – Distribution Poles and Fixtures Wood (Existing: 39R2, FPL: 40R2, OPC: 44R2.5)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364.1 – DISTRIBUTION POLES, TOWERS AND FIXTURES WOOD?

A. The Company proposes to increase the current 39-year ASL to 40 years and retain the R2 dispersion pattern. (See Exhibit NWA-1, page 727).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. For the first time the Company segregates the investment in poles between wood and concrete. (See Exhibit NWA-1, page 727). While Mr. Allis ran various actuarial band analyses he only discussed and presented the results of the overall band. (See Exhibit

NWA-1, page 727). Often this limited presentation is not a problem, but it is in this instance. The problem arises since Mr. Allis states that a 40R2 life-curve combination is "a good fit of the historical data for wood poles", and that result is the basis for his proposal. (See Exhibit NWA-1, page 728).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal results in an artificially short ASL. Therefore, I recommend a modest increase in ASL to 44 years with a corresponding R2.5 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. The Company's proposal at best reflects poor judgment when it relates to the investment in wood poles. Mr. Allis' sole reliance on the overall band actuarial results coupled with his apparent decision to skip the life estimation phase of his study is a fatal flaw for his proposal.

The historical data in the overall band analysis reflects the period 1941 through 2014. This period does not properly capture the changing chemical treatments for wood poles, nor does it begin to address the pole inspection program implemented in 2006 "to extend the life of wood poles not being replaced." (See OPC's Seventh Interrogatories No. 191 and Exhibit CRC-1, page 569 in Docket No. 080677-EI). This period also reflects the significant increase in the retirement of wood poles due to the storm hardening program. (See Exhibit NWA-1, page 727). It is hard to imagine that an

experienced depreciation analyst would rely on the results of the overall band analysis given the various factors noted.

What makes Mr. Allis' proposal and basis even less credible is the fact that he performed additional actuarial analyses that relied on different placement and/or experience bands (placement bands identify the length of the historical database, while experience bands identify the period during which retirement transactions are captured for analysis). While his decision to perform those additional analyses was appropriate, his omission of the results in his presentation to the Commission is inappropriate. The following graph sets forth the OLTs derived from the overall band, as well as other placement and/or experience bands that capture the trend in the data.

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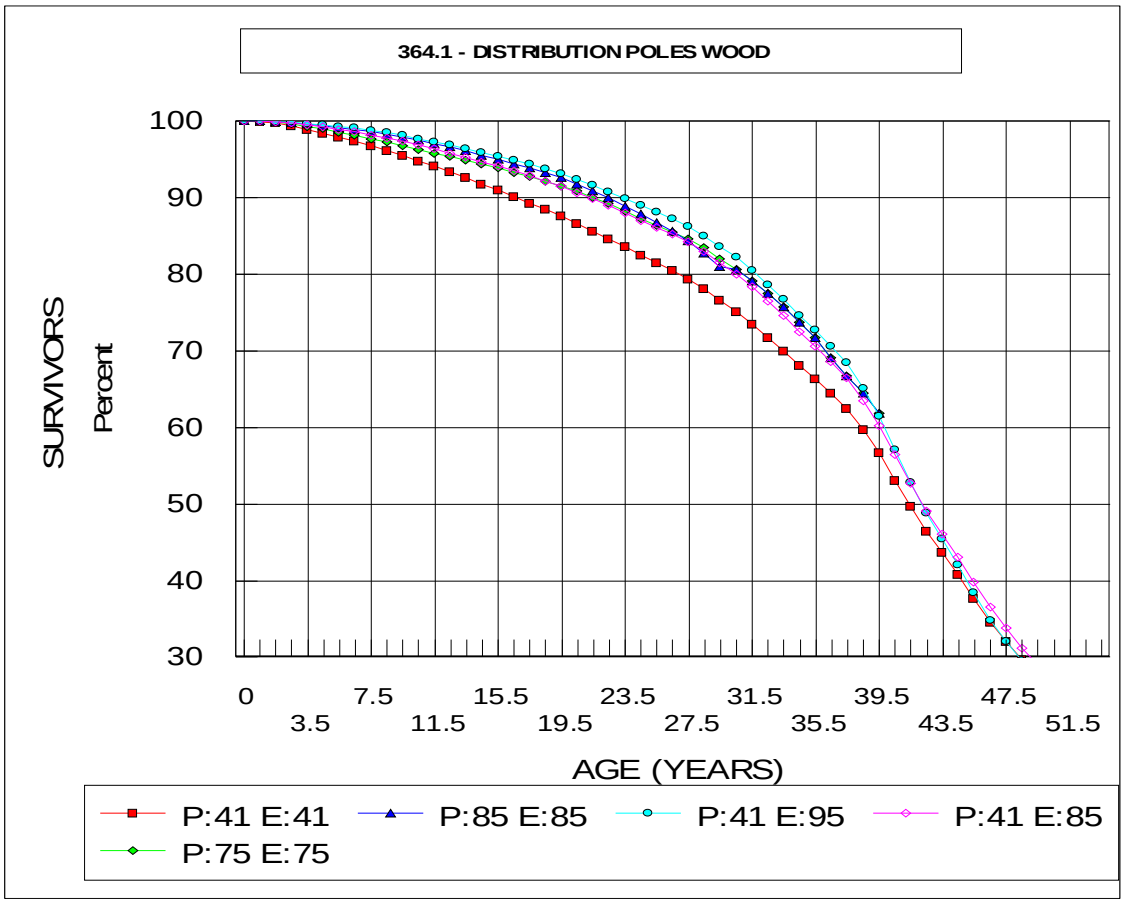
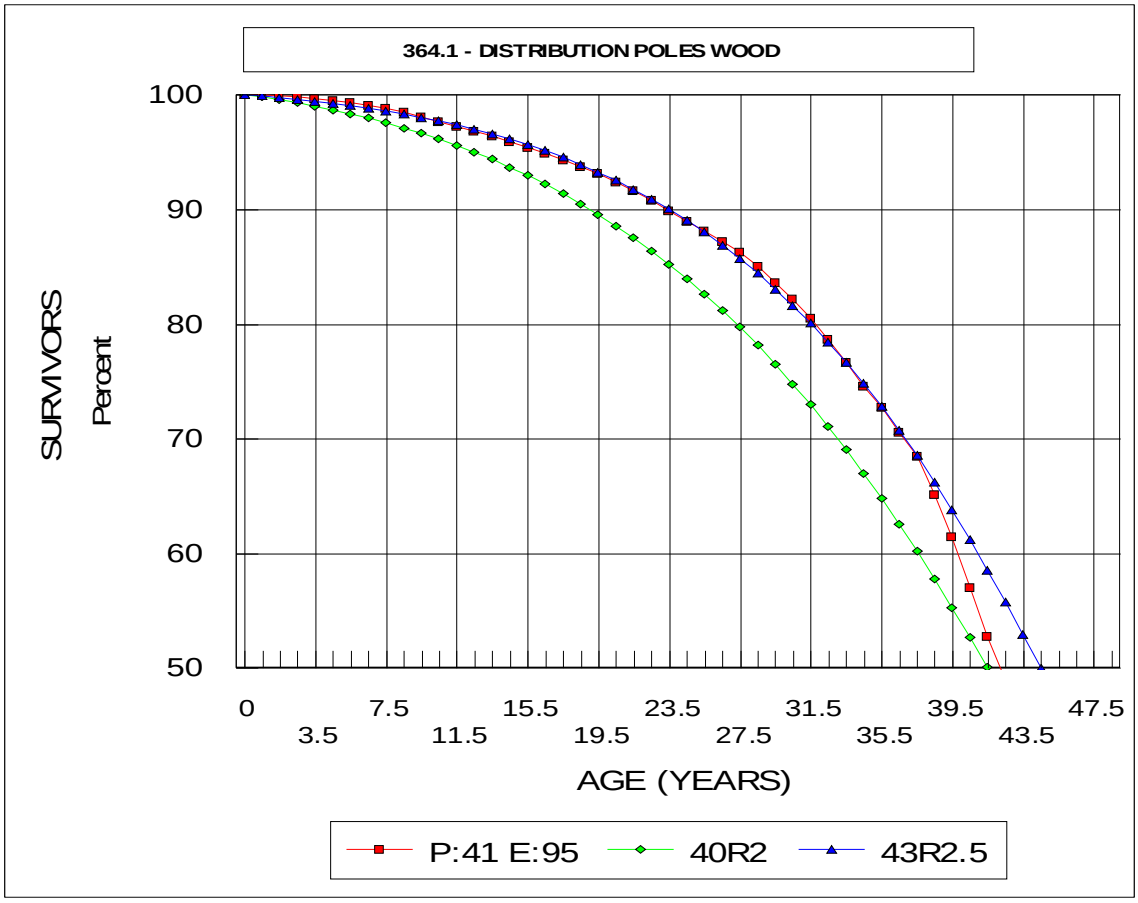


While the other band analyses are difficult to distinguish, the overall band presented by Mr. Allis is the only one distinctly different from all the others. This type of information is precisely what an experienced depreciation analyst should recognize and rely on. Indeed, Mr. Allis did precisely that elsewhere; but not here.

Proper judgment should have recognized the fact that older data points are not indicative of the current investment. Older data points will not reflect the impact of the pole inspection program nor the current chemical treatment. Had Mr. Allis only paid attention to just a more current experience band, it would be obvious that the minimum ASL would exceed 40 years. As shown in the following graph, a 43-year ASL is a

superior fit to the more current experience band, but still would not capture the trend reflective of more current investment.



While a 43R2.5 life-curve combination is a superior fit to the trend in the data than is Mr. Allis' proposal, it still understates realistic life estimation. An increase in ASL from the 43-year range to the upper 40-year range would be more realistic. However, in order to remain appropriately conservative, I recommend an increase of only one year as an initial step in this case. This recommendation reflects strong reliance on the concept of gradualism and the Commission would still be well within reasonable bounds to adopt a longer life, easily up to 45 years and still be realistic.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $6,213,541 to annual depreciation expense.

Account 364.2 – Distribution Poles and Fixtures Concrete (Existing: 39R2, FPL: 50R1.5, OPC: 56S0)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364.2 – DISTRIBUTION POLES, TOWERS AND FIXTURES CONCRETE?

A. The Company proposes a 50R1.5 dispersion pattern for this new subcategory of plant. (See Exhibit NWA-1, page 728).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

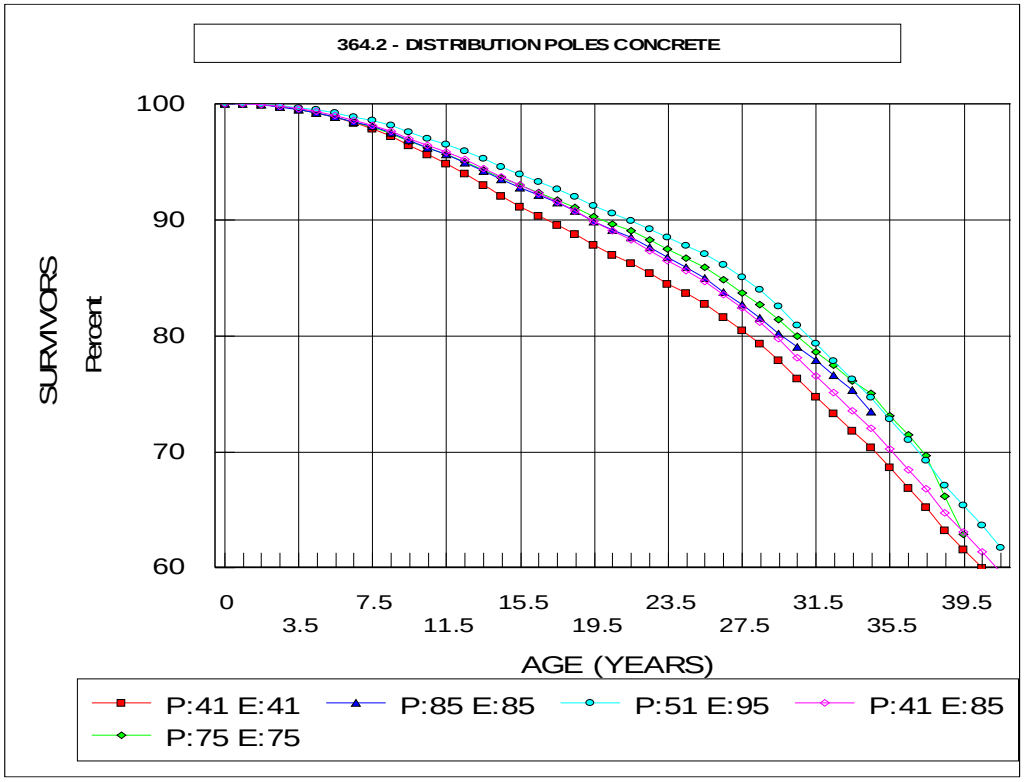
A. For the first time the Company segregates the investment in poles between wood and concrete. (See Exhibit NWA-1, page 727). Mr. Allis states that around a 45-year ASL reflects "the best fitting curves", but that "newer concrete poles are stronger than those installed 30 or 40 years ago, and as a result the expectation is that newer concrete poles could have a longer service life than is reflected in the historical data". (See Exhibit NWA-1, page 728). Mr. Allis concludes that his proposal "is supported by the analysis of more recent placement bands and information provided by management." (See Exhibit NWA-1, page 728).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

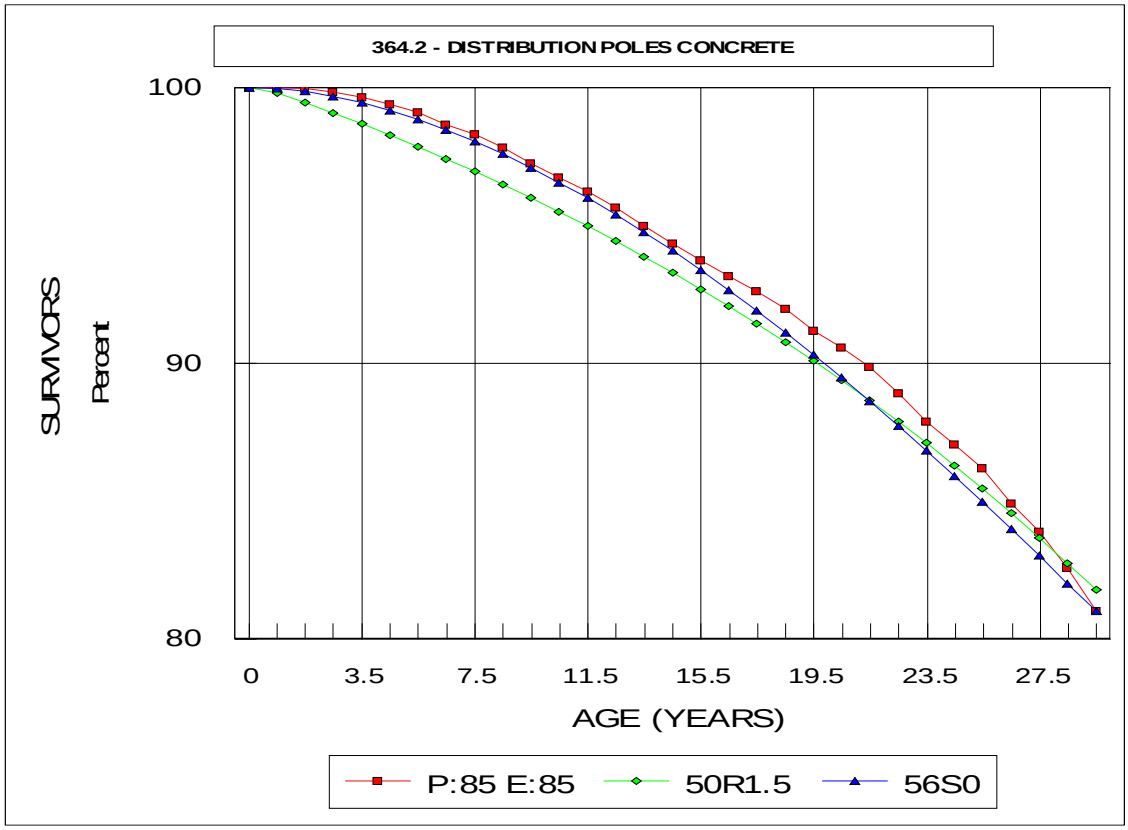
A. No. The Company's proposal still reflects an artificially short ASL. Therefore, I recommend an increase in ASL to a 56-year ASL with a corresponding S0 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I agree with Mr. Allis that the results of the actuarial analyses of the historical data do not properly capture the changing life characteristics of concrete poles, (See Exhibit NWA-1, page 728). However, a more realistic life estimation for this subaccount must be something more than a general match to a 40-year actuarial analysis (1975-2014). As shown in the following graph, the various placement and experience bands more current than the overall band indicate an elevated OLT and thus a longer ASL.



Based on the information provided by Company personnel that "newer concrete poles are stronger than those installed 30 or 40 years ago", nothing shorter than the indications from the 1985 to 2014 placement and experience band should be expected. In fact, given the implementation of a pole inspection program, more up to date manufacturing and maintenance technology and practices, even the most current actuarial analyses performed by Mr. Allis would understate the most appropriate expectation of life for this account. As shown in the following graph, a 56S0 life-curve combination is a similar but superior fit of the more current experience band compared to Mr. Allis' proposal.



Given the similarity of the recommendation, appropriate judgment would lead to the conclusion that the 56-year ASL value is more realistic. First, the maximum life for Mr. Allis' proposal is only 101 years, while my recommendation reflects a 113-year maximum life. Even a 113-year maximum life expectation for a modern concrete pole may be short. In addition, Gannett Fleming's industry data indicates that a 50-year ASL is representative based on mean, medium and mode values. (See Gannett Fleming's industry data provided in response to CEP 6-2 in Docket No. 44941 before the Public Utilities Commission of Texas). However, such industry values correspond predominately to wood poles. Both FPL and Mr. Allis recognize that concrete poles will last longer than wood poles. Therefore, reliance on a 50-year ASL would not be appropriate. Further support for a mid 50-year ASL is the life values for Transmission concrete poles. My recommendation for Transmission poles not only is conservative but also provides additional support for a 56-year ASL for this account.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $4,281,779 to annual depreciation expense.

Account 365 – Distribution Overhead Conductors and Devices (Existing: 41S0, FPL: 48R1, OPC: 53R1)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 365 – DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?

A. The Company proposes a 48R1 life-curve combination for this account. (See Exhibit NWA-1, page 731). This proposal represents a significant change from the existing 41S0 life-curve combination adopted by the Commission.

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis states that the "48-R1 survivor curve is a good fit of the representative data points." (See Exhibit NWA-1, page 731). Mr. Allis also references concerns associated with the possible impact of the storm hardening program. (See Exhibit NWA-1, page 731).

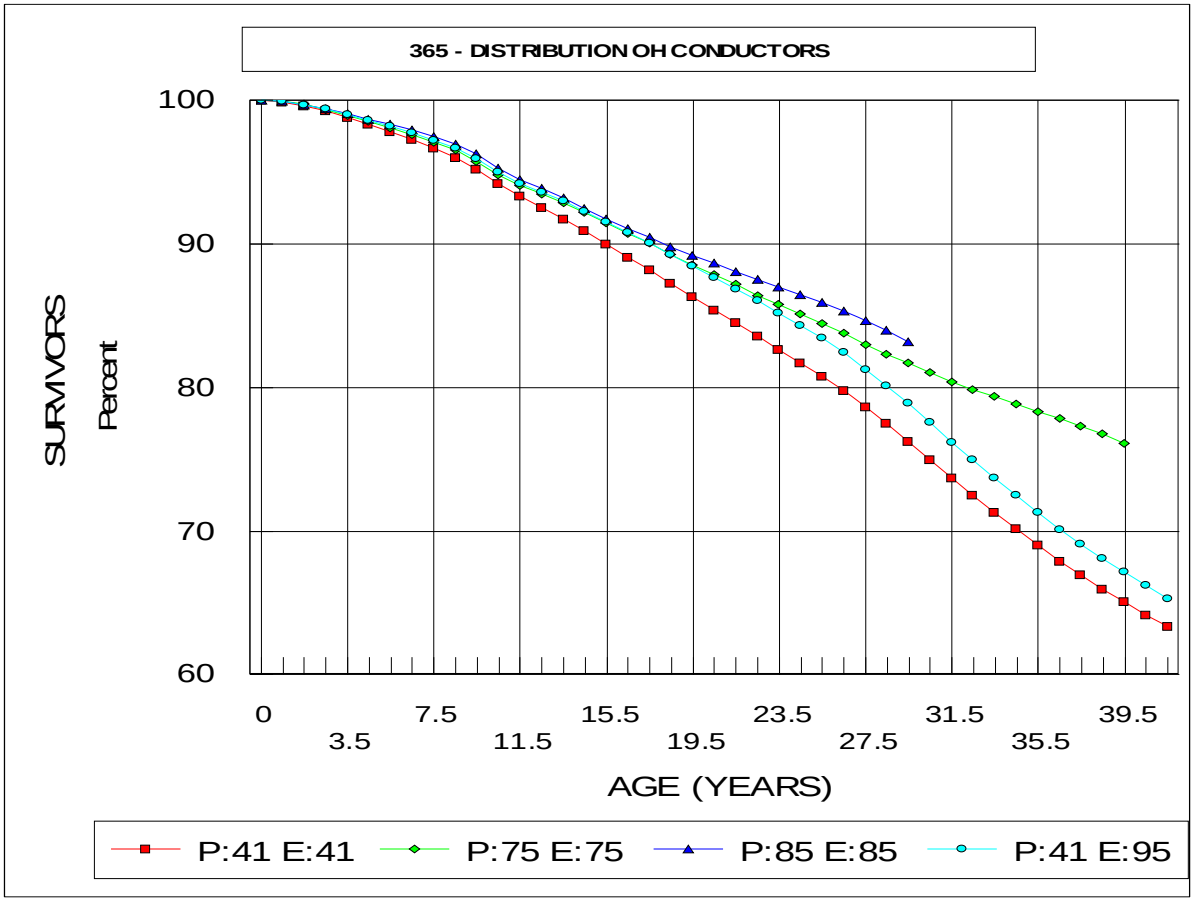
Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal still reflects an artificially short ASL. Therefore, I recommend an increase in ASL to a 53-year ASL with a corresponding R1 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

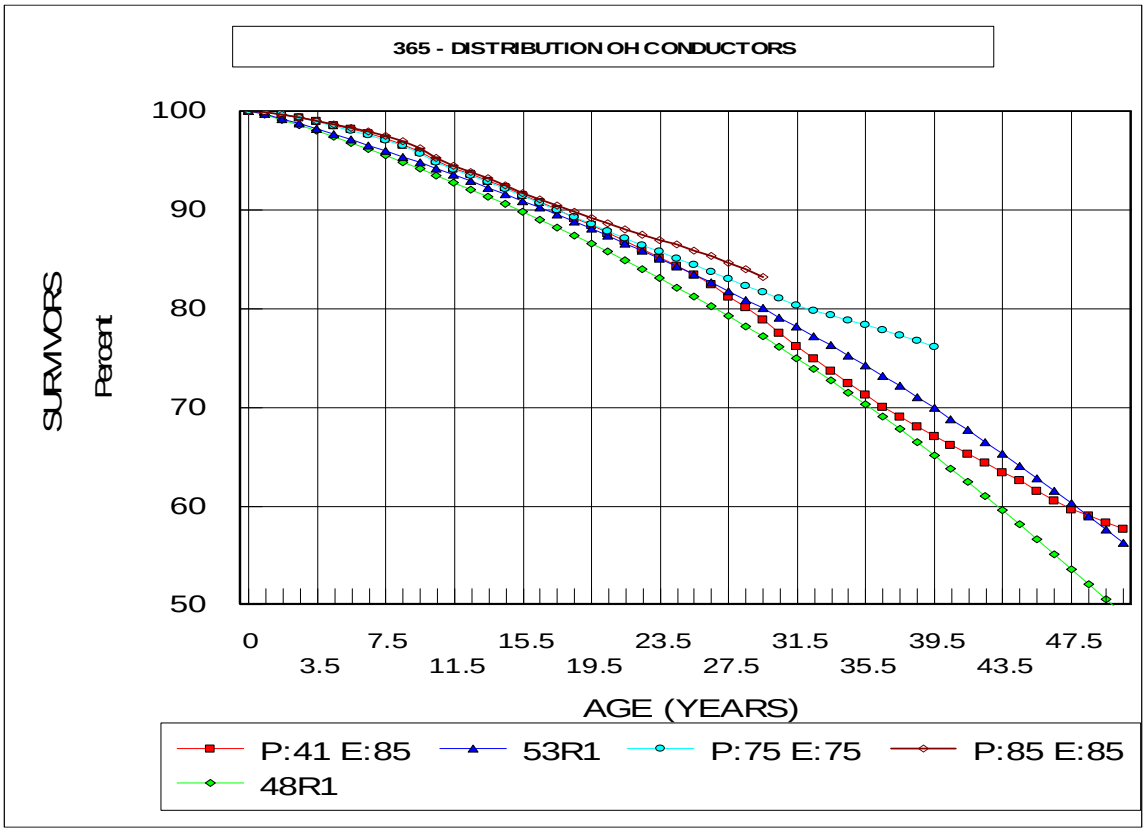
A. This is another account where Mr. Allis performed additional actuarial analyses of the historical data that captured the changing life characteristics of conductors over time. (See OPC's Production of Documents First No. 2, 2014 – Trans, Dist and Gen Plant – OLTs and Preliminary Curve Fits). While Mr. Allis performed these additional analyses he either ignored or forgot about them when he made his final determination.

As shown in the following graph, the additional actuarial analyses all yield elevated OLTs compared to the full band relied upon by Mr. Allis. Elevated OLTs normally indicate longer ASLs.



Mr. Allis' failure to recognize the trend to a longer ASL in the life estimation phase of a study is inappropriate. Given that all additional analyses yield longer ASLs and that Mr. Allis recognizes trends for other accounts, his actions for this account are unexplained and inconsistent. A more realistic life estimation for this account must be something greater than the 48-year ASL Mr. Allis found to be a "good fit of the representative data points." The previously referenced representative data points that

produced Mr. Allis' "good fit" conclusion correspond only to the full actuarial band analysis. As shown in the following graph, my recommendation is a superior fit to the more current placement and experience bands than is Mr. Allis' inappropriately constrained proposal.



Further support for a longer life than proposed by Mr. Allis are his interpretation of the impact of the storm hardening program and maximum life considerations. As previously discussed for Account 356, Mr. Allis' concerns regarding the impact of the storm hardening program are misplaced. Next, Mr. Allis' proposal yields a 96-year maximum life. Given that Gannett Fleming recommends maximum lives elsewhere for other utilities in excess of 120 years (including an extensive number in excess of the 108-year maximum life associated with my recommendation), the reasonableness of my recommendation is confirmed.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $9,047,446 to annual depreciation expense.

Account 367.6 – Distribution UG Conductors – Duct System (Existing: 38S0, FPL: 42S0, OPC: 46L0.5)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 367.6 – DISTRIBUTION UG CONDUCTORS AND DEVICES – DUCT SYSTEM?

A. The Company proposes a four-year increase in ASL while retaining the S0 dispersion pattern. (See Exhibit NWA-1, page 737).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis states that the "best fitting survivor curves typically had somewhat longer service lives than the approved estimate, with the best fitting curves having average service lives around 40 years. The approved S0 survivor curve continues to be a good fit of the historical data." (See Exhibit NWA-1, page 737). Through discovery, Mr. Allis also stated that (1) the results of the other band analyses were similar, (2) there are no "convincing reasons to select an ASL of 45 years or longer, (3) due to corrosion issues he would expect retirements to increase with age, (4) the improvements in the quality of underground cable are already supported by the historical data, and (5) the environment in Florida "may limit the impact on longer service lives." (See OPC's Seventh Interrogatories No. 201(h)).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

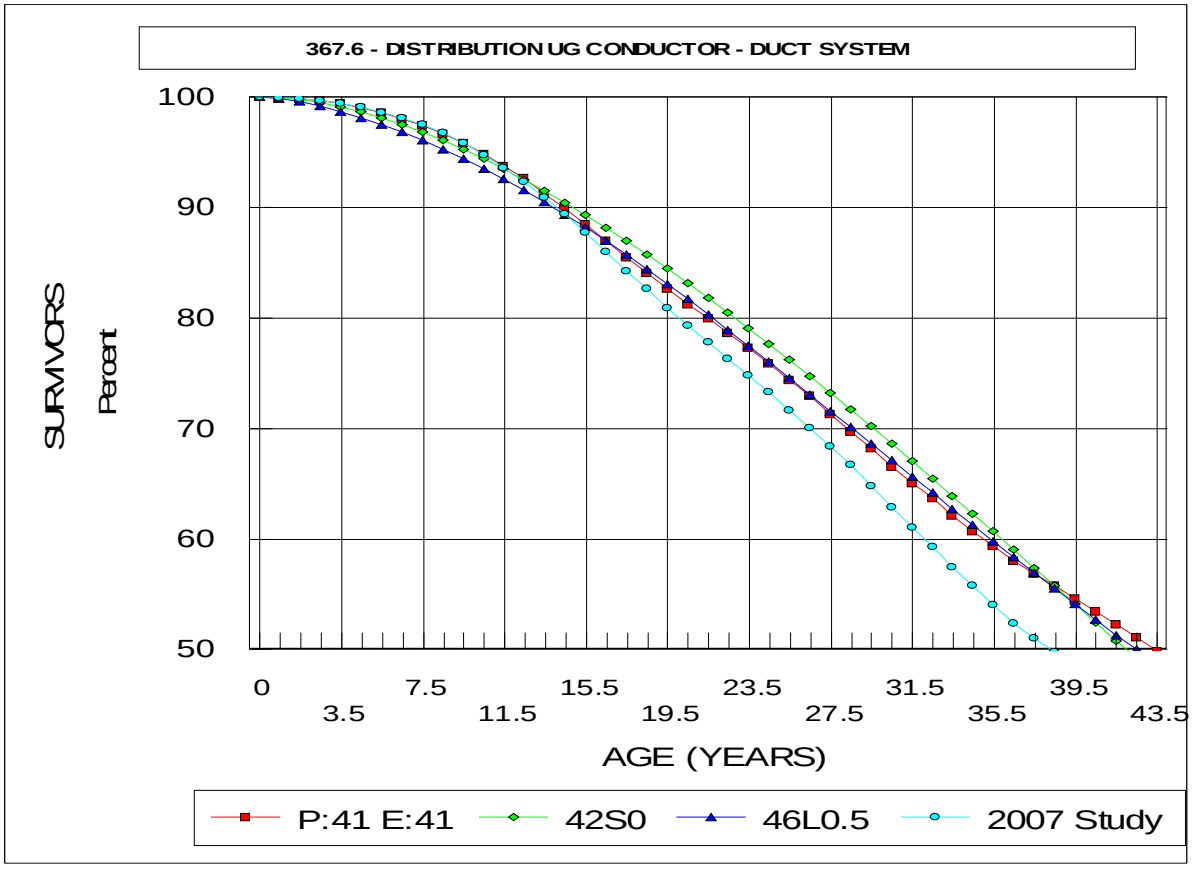
A. No. The Company's proposal reflects a continued effort to maintain an artificially short ASL. Therefore, I recommend an increase in ASL to 46 years with a corresponding L0.5 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. First, it must be noted that while I recommended a longer ASL than FPL in the prior case, the Commission adopted the proposal presented by Gannett Fleming. It appears the Commission was swayed by Gannett Fleming's rebuttal testimony claiming my recognition of additional life expectation due to improved quality of cable was "misleading" and that Gannett Fleming was "not aware that there has been an established life in the industry for tree retardant cable that indicates a life longer than 38 years." In an effort to maintain an artificially short ASL Gannett Fleming further stated that the "industry range was 28-35 years" for this type of investment. (See Mr. Clarke's rebuttal testimony in Docket No. 080677-El at page 49). While I will not directly address the veracity of those statements, I will note that now Gannet Fleming recognizes the "improvements in the quality [of] underground conductor" as a basis for an ASL longer than 38 years (See OPC's Seventh Interrogatories No. 201(h)), and that the industry range is more realistically identified as being between 40 to 60 years (See OPC's First Production of Documents No. 41 Attachment 1).

From a purely mechanical life analysis standpoint, my recommendation of a 46L0.5 life-curve combination is a similar but superior fit to the meaningful portion of the

actuarially derived OLT than is Mr. Allis' proposal. This can be seen in the following graph.



However, the determination of the appropriate life characteristics for this account is not limited to a purely mechanical life analysis. The life estimation phase of a study takes into account other factors. In this particular instance, Mr. Allis' judgment in this case mirrors Gannett Fleming's rebuttal in the prior case.

Mr. Allis' response to discovery regarding life characteristics for this account hinges on a perspective of needing to be "convinced" or as stated in the prior case needing to be made "aware" of something that exists, but will not be recognized by him as being

adequate. That is not the appropriate standard. Indeed, as time passes and the impact of the "improvements in the quality of underground cable" that Mr. Allis' now admits to manifests itself into the historical data, the OLT in the future will continue to elevate just as it did from the prior study to the current study. This is what an experienced depreciation would not only recognize, but also embrace in the life estimation phase of a study.

Another factor in support of my recommendation is a statement made by FPL personnel to Mr. Allis that did not make it to his testimony or study. FPL personnel stated that the "life of cable for overhead and underground is similar." (See OPC's First Production of Documents No. 38 Attachment 2). Given that Mr. Allis proposes a 48-year ASL for overhead cable, it is hard to reconcile a 42-year ASL, which is 13% lower, as being "similar". Moreover, Mr. Allis found it appropriate to increase the ASL for overhead conductor by eight years or 20% (48-40=8, 8/40=20%)) from his prior recommendation (See NWA-1 page 731), while limiting the increase for underground conductor to only four years or 11%.

The reality is that this is an account in transition from older cable subject to higher rates of failure due to water intrusion ("treeing" related faults) compared to newer cable that reflects several advancements in the quality of cable over time to correct for prior issues. The proper means of dealing with this situation is not to continuously look to the past as a basis to retain an artificially short ASL, but to make real progress and take a meaningful step to catch up to current life characteristics of the investment. My

recommendation better captures the transition to a longer ASL, but utilizes a dispersion pattern that may require change in the future as more empirical data becomes available. My recommendation is a compromise of a shorter ASL than is most likely warranted with a dispersion pattern that is not common but still used by others, including Gannett Fleming.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $5,916,659 to annual depreciation expense.

Account 367.7 – Distribution UG Conductors- Direct Buried (Existing: 35R2, FPL: 35R2, OPC: 45L1)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 367.7 – DISTRIBUTION UG CONDUCTORS AND DEVICES- Direct Buried?

A. The Company proposes to retain the existing 35R life-curve combination. (See Exhibit NWA-1, page 739).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis states that the results of his "statistical analysis was not conclusive although more recent placement bands indicated shorter service lives than the overall band." Mr. Allis further states that the "Company's plans to replace older direct buried cable provide further reason to not increase the service life for this account at this time." (See Exhibit NWA-1, page 739). Through discovery, Mr. Allis also stated that the

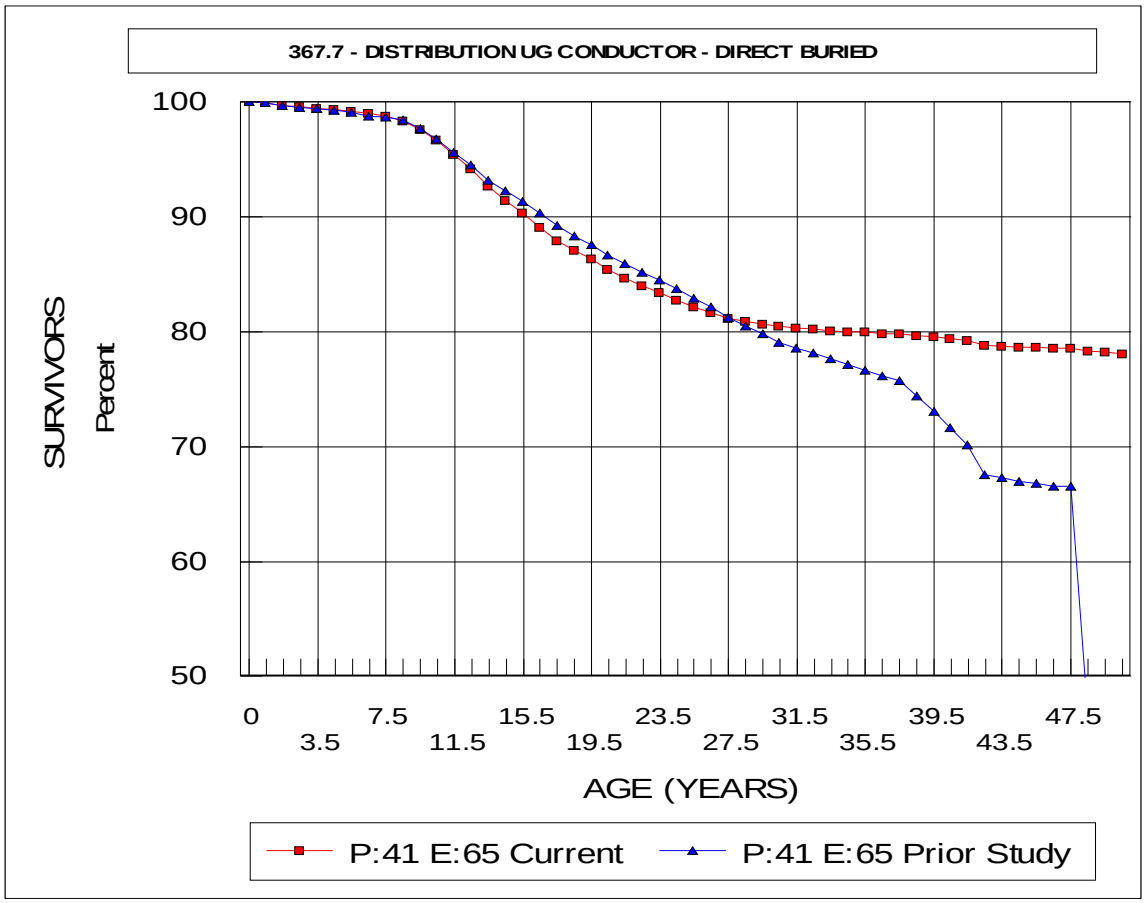
inconclusive result of the current overall band analysis was similar to the prior study and that relationship "supports retaining the existing estimate." (See OPC's Seventh Interrogatories No. 201(d)). Mr. Allis also stated that the most recent 20 and 30 year bands indicate shorter service lives than the overall band." (See OPC's Seventh Interrogatories No. 201(d)).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal runs contrary to its historical data. Therefore, I recommend an increase in ASL to 45 years with a corresponding L1 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

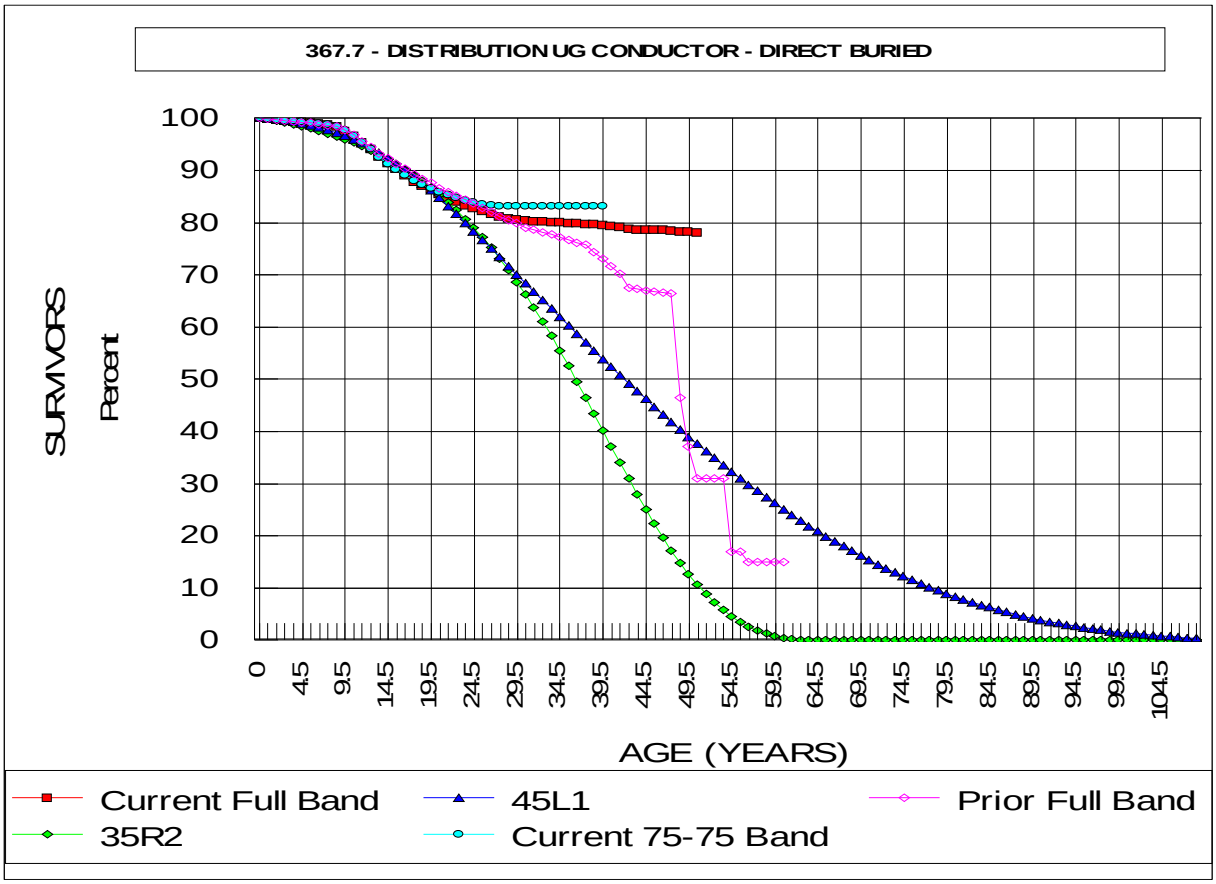
A. While I agree that the results of the actuarial analyses are not as conclusive as one might desire, the results do not support Mr. Allis' proposal to retain the existing parameters. Mr. Allis' reference to the similar indications in the last study as a basis for retaining the parameters derived from such analysis actually demonstrates the underlying poor judgment for retaining the existing parameters. The 2009 Depreciation Study specifically stated that the "actuarial analysis results indicate the currently authorized service life of 34 should be increased slightly. Industry data suggest a 29 to 53 year average service life with the average around 39 years." (See CRC-1, page 605 in Docket No. 080677-EI). What is now known is that based on seven years of additional actual transactions reflecting 25% more retirement activity, the OLT has elevated, indicating longer lives. The following graph shows the change in OLTs over the past seven years.



Therefore, if the prior study indicated the service life of 34 should be increased and the current study identifies a dramatic elevation of the OLT beyond age 30, then there is no logic that can reasonably support a 35-year ASL. Moreover, Gannett Fleming now identifies industry values that have increased with the upper end of the range expanding to 65 years and the average increasing to values approaching 50 years. (See Gannett Fleming's industry data provided in response to CEP 6-2 in Docket No. 44941 before the Public Utilities Commission of Texas).

While the current actuarial results are not as conclusive as one might desire, they do support an ASL significantly greater than 35 years. As shown in the following graph, my recommendation better captures the continuous elevation of the OLT beyond age

24 as measured from the prior study to the full band in the current study to the 1975-2014 placement/experience band in the current study.



Proper judgment and experience would not have resulted in selecting as rapid a decline in an Iowa Survivor curve beyond age 24 as Mr. Allis has done, especially when the trend in the actual data is strongly upward. Moreover, Mr. Allis' proposal assumes a maximum life for the investment in this account of only 66 years. However, FPL reports assets that have already exceeded such artificially short maximum life, and thus correspondingly artificially short ASL proposed by Mr. Allis. While the maximum life reflected in my recommendation might on the surface appear long at approximately 140 years, it is nevertheless realistic. Indeed, Gannett Fleming has recommended a maximum life of over 130 years elsewhere. (See Gannett Fleming's industry data

provided in response to CEP 6-2 in Docket No. 44941 before the Public Utilities Commission of Texas).

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $7,848,266 to annual depreciation expense.

Account 373 – Distribution Street Lighting (Existing: 30R0.5, FPL: 35O1, OPC: 39L0)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 373 – DISTRIBUTION STREET LIGHTING?

A. The Company proposes a major change from the existing 30R0.5 life-curve combination to a 35O1 life-curve combination. (See Exhibit NWA-1, page 752).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

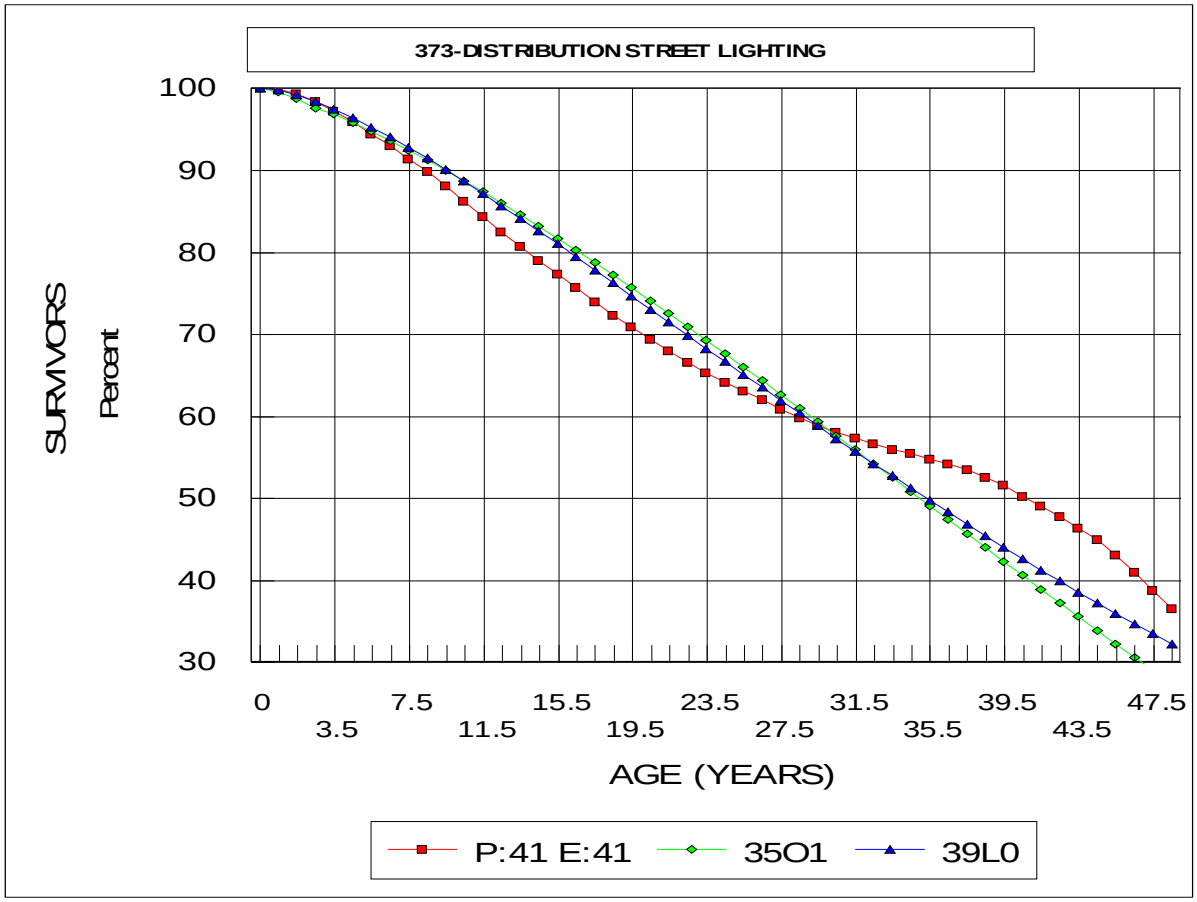
A. Mr. Allis states that the "the statistical analysis indicated a longer service life" and that the "O1 type curve represents a better fit of the historical data than the approved R0.5 type curve." (See Exhibit NWA-1, page 752).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal still reflects an artificially short ASL. Therefore, I recommend an increase in ASL to 39 years with a corresponding L0 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I agree with Mr. Allis' initial thought that the actuarial analyses do indicate a longer life for street lighting assets. However, Mr. Allis did not realistically attempt to select the best available curve for this account. As shown in the following graph, Mr. Allis' proposal is not the best fitting curve early on, but becomes a particularly poor fit after age 30. While my recommendation is also not a particularly great fit of the historical data, it is superior throughout the OLT. Moreover, it better captures the noticeable change in the annual retirement rate after age 30.



Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $1,707,755 to annual depreciation expense.

Account 392.3 – General Vehicles Heavy Trucks (Existing: 12S3, FPL: 12S3, OPC: 13S3)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 392.3 – GENERAL HEAVY TRUCKS?

A. The Company proposes to retain the existing 12S3 life-curve combination. (See Exhibit NWA-1, page 758).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis states that the existing 12S3 life-curve combination "continues to be a good fit of the historical data." (See Exhibit NWA-1, page 758).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal relies on unusual historical data. Therefore, I recommend a nominal one-year increase in ASL to 13 years with a corresponding S3 Iowa Survivor Curve.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

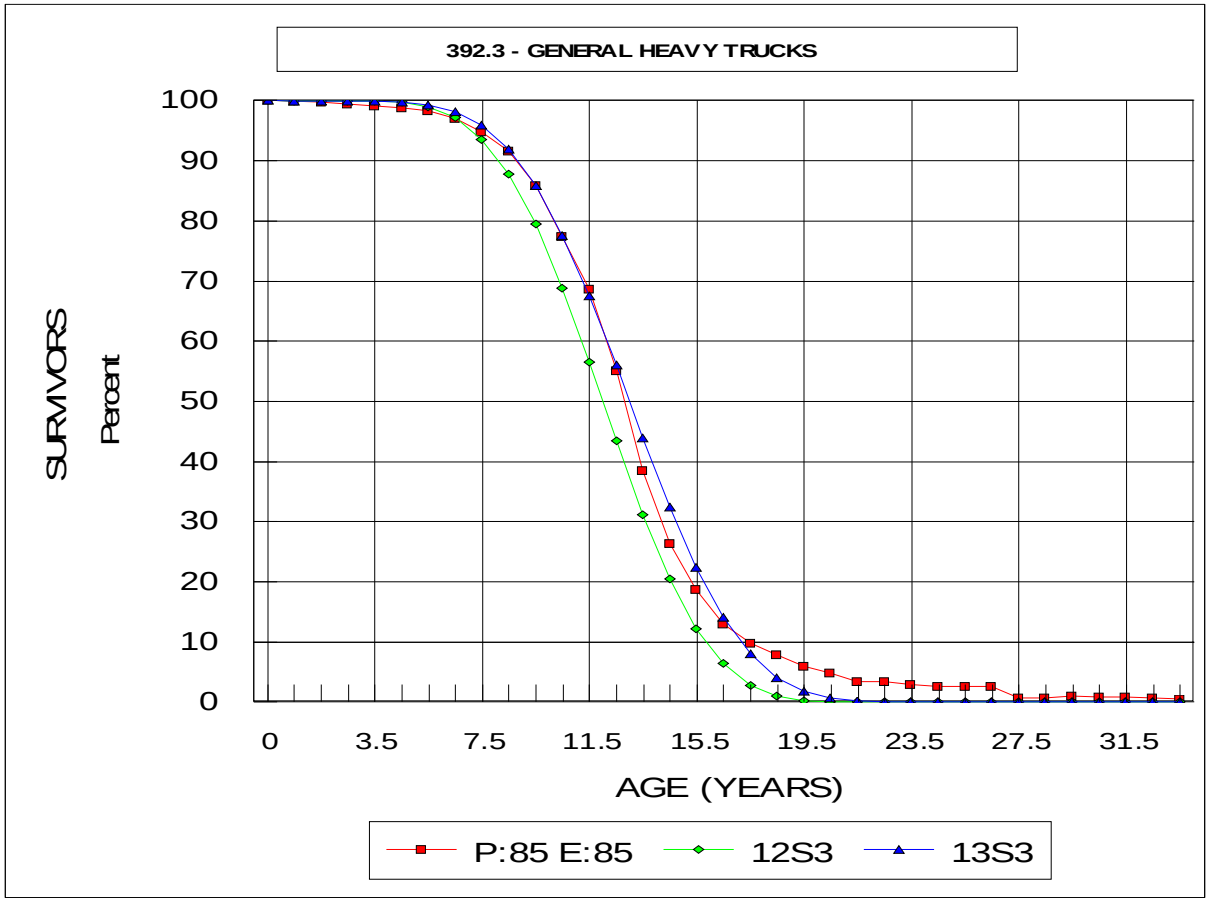
A. While I also rely on the results of the actuarial analyses, I rely on a more recent actuarial analysis and recognized atypical activity that should be removed from the estimation process.

First, Mr. Allis' reliance on a 1949-2014 placement/experience band is questionable. Vehicles have changed over the past 65 years. A more experienced depreciation analyst would have relied on more current life indications and would not have performed an analysis dating back 65 years. Indications from that non-representative of a time period might only distort current indications.

Second, the non-representative activity that should be normalized or eliminated is the $6.8 million retirement at age zero (0). (See Exhibit NWA-1, page 290). This level of retirement activity for brand new assets is an "eye-catcher" for an experienced depreciation analyst. Whether the event(s) actually occurred, they represent the type of event that would be normalized or eliminated in the life estimation phase of a study. Retirement of vehicles basically as they are driven off the show room floor, and if not covered by warranties or insurance, qualify as nonrecurring events when they are of this magnitude.

The following graph presents a more appropriate investigation of life characteristics for this type of investment. The graph is based on the most recent band analyses performed. My recommendation for a one-year extension in ASL is a superior fit to the data. From a conformational standpoint, a 13-year ASL for this type of investment is

somewhat on the low side for utilities that maximize the use of such vehicles. (See Gannett Fleming's industry data provided in response to CEP 6-2 in Docket No. 44941 before the Public Utilities Commission of Texas).



Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $1,738,601 to annual depreciation expense.

SECTION VIII: MASS NET SALVAGE

A. Introduction

Q. WHAT IS NET SALVAGE?

A. FERC's Uniform System of Accounts ("USOA") defines various salvage related terms as follows:

> "Salvage value" means the amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale; or, if retained, the amount at which the material is recoverable is chargeable to Materials and Supplies, or other appropriate amount.
>
> "Cost of removal" means the cost of demolishing, dismantling, tearing down or otherwise removing electric plant including the cost of transportation and handling incidental thereto.

One additional definition is required order to properly follow the USOA Electric Plant Instructions. That definition is for "Replacing" or "replacement," and is as follows:

> "Replacing" or "replacement," when not otherwise indicated in the context, means the *construction or installation* of electric plant in place of property retired, *together with the removal of the property retired*." (Emphasis added).

In other words, "net salvage" is simply the value received for the sale, reuse, or reimbursement of retired property (gross salvage), less the cost of retiring such property (cost of removal), whether the retirement reflects demolition of the item of plant or only the accounting transaction for retiring an item of property in place (abandonment). Limited or no costs of removal should occur with replacement activity. This situation conforms to USOA Electric Plant Instructions 10B(2). That instruction recognizes cost of removal being "appropriate" when not accompanied by replacement activity.

However, the crediting of the plant account for the retirement shall occur, with or without replacement.

Q. CAN YOU ILLUSTRATE "NET SALVAGE" USING AN ACTUAL FPL EXAMPLE?

A. Yes. For Account 365, Distribution Overhead Conductors and Devices, the Company requests a negative 80% net salvage. This means FPL assumes that removing a conductor on a pole will impose a net cost on FPL that equals 80% of the original cost of buying and installing the conductor! Given the plant balance of $2.2 billion, the Company's proposed net salvage figure would result in approximately $1.8 billion of depreciation expense over the life of the investment *above* the recovery of the original $2.2 billion investment. (See Exhibit NWA-1, page 65.) The proposed annual depreciation rate for this account to recover all proposed amounts, both investment and net salvage, is 3.67%. If one assumes the scrap value of the conductor at retirement is exactly offset by the cost of removing it, in other words, a zero level of net salvage, the annual depreciation rate falls to only 1.46%. The difference in rates that would be applied to the $2.2 billion plant balance corresponding to the different net salvage assumption results in $50 million of additional annual revenue requirements for this account alone.

Q. WHAT PERIOD HAS THE COMPANY CHOSEN TO ANALYZE TO DERIVE ITS NET SALVAGE VALUES?

A. The Company has analyzed a 29-year period, 1986 through 2014. (See NWA-1, page 362).

Q. HAVE YOU REVIEWED ALL OF THE INFORMATION PRESENTED BY THE COMPANY IN SUPPORT OF ITS NET SALVAGE REQUEST?

A. Yes. The information provided is inadequate to support or demonstrate the appropriateness of its request for an overall *negative 29%* net salvage for electric transmission, distribution and general property. (See Exhibit NWA-1, page 65). FPL's 2014 Study includes $7.1 billion for negative net salvage related to electric mass property over the life of the investment. FPL's requested negative net salvage requires approximately $197 million of annual revenue requirements as compared to what a zero (0) level of net salvage would yield.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATION CONCERNING PROPOSED NET SALVAGE VALUES FOR MASS PROPERTY.

A. FPL's proposed net salvage reflected in the 2014 Study is flawed and insufficiently substantiated. As a result, it proposes excessive levels of negative net salvage. I recommend a reduction to FPL's depreciation expense based on adjustments to its proposed net salvage level for 13 accounts as summarized in the following table.

Summary of OPC's Recommended Net Salvage Adjustments

Account	FPL Proposed	OPC Proposed	OPC Adjustment	Impact
353	(2%)	0%	2%	($1,191,149)
354	(25%)	(15%)	10%	($1,018,685)
355	(50%)	(40%)	10%	($3,310,591)
356	(55%)	(45%)	10%	($2,282,226)
362	(10%)	(5%)	5%	($2,805,684)
364.1	(100%)	(60%)	40%	($15,941,184)
364.2	(100%)	(60%)	40%	($8,098,004)
365	(80%)	(60%)	20%	($11,371,415)
367.6	(5%)	0%	5%	($2,732,496)
369.1	(125%)	(85%)	45%	($4,953,744)
370	(30%)	(20%)	10%	($546,123)
370.1	(30%)	(20%)	10%	($5,499,976)
390	(10%)	10%	20%	($2,354,193)
Total				**($62,105,471)**

The standalone impact of my net salvage recommendations is a reduction of $62,105,471 in annual depreciation expense.

Q. WHY DO YOU BELIEVE FPL'S PROPOSED NET SALVAGE LEVELS ARE INAPPROPRIATE?

A. There are numerous problems with FPL's proposals. For example, (the following is not intended to be a comprehensive listing):

- Mr. Allis' analysis generally boils down to nothing more than acceptance of simple arithmetic averages of historical data. The Company and Mr. Allis have made no meaningful effort to actually identify and understand what is reflected in FPL's historical retirement database from a net salvage standpoint.

- Mr. Allis fails to investigate in a meaningful manner the reasonableness of unusually high levels of cost of removal.
- Mr. Allis fails to investigate, explain or justify significant changes in net salvage values between the existing and proposed levels. The failure to reasonably explain the underlying reasons for changes that cause revenue requirements to increase by tens of millions of dollars annually for individual accounts is unacceptable.
- Mr. Allis inconsistently relies on the full 29-year band analyses and 5-year band analyses for some accounts, but only on 5-year or recent 3-year rolling band results from other accounts, then only on 20-year and 10-year band results from other accounts, and so on. This unexplained, arbitrary and inconsistent picking and choosing results in more negative net salvage levels than should otherwise be the case.
- Mr. Allis has identified trends or changes in practices or procedures, but often fails to act upon such information.
- Mr. Allis fails to adequately recognize, or recognize at all, the impact that economies of scale will have in the future.
- Mr. Allis makes no meaningful attempt to explain why the historical values relied upon sometimes produce negative net salvage values that are the most negative or among the most negative in the industry.

In summary, when Company requested net salvage proposals seek approximately *$200 million of annual revenue requirements*, the Commission and customers are entitled to a *qualitative* presentation of the basis for net salvage proposals adequate to support the request. FPL has not met this standard with its study. I recommend that the

Commission order the Company to develop and present -- not just a depreciation study supported by substantial *quantities of paper* -- but a study that is substantiated by *meaningful levels of explanations and analyses* of what caused the retirement, and to determine whether such historical causes are properly indicative of future expectations. Mr. Allis approach of simply claiming in a generalized manner that *costs* have increased can no longer be an acceptable basis for seeking such dramatic increases in annual revenue requirements.

The concern I raise is the same concern that I was requested to address at the 2008 Annual NARUC meeting and that I have raised before various regulatory agencies. As noted at the beginning of my testimony, other regulatory bodies are no longer willing to accept the unsupported conclusory statements made by depreciation analysts as adequate basis to support the request for a substantial revenue requirement. I submit that if it is reasonable for the Commission to have previously required substantial documentation and support for assumptions when reviewing forecasts for future resources and loads, then it should demand no less for projections of future net salvage when such net salvage requests seek billions of dollars from customers over the life of the assets. The Company's presentation in this case, even though backed by significant quantities of paper, does not meet the standard. It is important to distinguish quantity of paper from quality of information. Mr. Allis' limited references to reliance on historical averages, and unsupported, unsubstantiated and nebulous references to what is "expected", "anticipated", "could" or "might" occur, etc. do not constitute a

reasonable and appropriate basis upon which to establish such substantial levels of revenue requirements.

B. <u>Reliance on Historical Averages</u>

Q. HAS THE COMPANY RELIED ON HISTORICAL AVERAGES EXTENSIVELY FOR ITS NET SALVAGE PROPOSALS?

A. Yes. As can be seen in Exhibit NWA-1, Mr. Allis' support and justification for his net salvage proposals basically refers to various combinations of the overall band, the 20-year, 10-year, 5-year and recent three-year rolling averages of the historical data. Mr. Allis failed to examine in a meaningful manner what is reflected in the historical data in order to establish whether relying on such historical data as the basis for his future proposals is reasonable and appropriate.

Q. WHY IS A REVIEW OF THE UNDERLYING DATA IMPORTANT?

A. For the underlying historical data to be a potentially valid tool for providing indications for the future, it is necessary to determine if it is representative of the current investment. For example, if the historical database reflects a disproportionate level of retirement activity for pole mounted transformers for Account 368 – Distribution Line Transformers, but understates the net salvage associated with the much larger investment in pad mounted transformers, then the historical results will yield false or misleading indications of what will transpire in the future.

Q. DID GANNETT FLEMING'S SIMPLISTIC APPROACH MISS THIS CHANGING SITUATION FROM POLE TO PAD MOUNTED LINE TRANSFORMERS?

A. Yes. Account 368 – Distribution Line Transformers is the second largest mass property plant account. Due to the magnitude of this account, even small differences in life or net salvage will have an appreciable impact on revenue requirements. A major problem is caused by FPL's practice of relying on simplistic averaging of historical data without any meaningful investigation into whether the database is representative of what will transpire in the future to the current investment. In the prior depreciation study, Gannett Fleming simply assumed that the resulting values obtained from a 20-year average and a 5-year average yielded predictive characteristics of future net salvage transactions, and proposed a 10 percentage point change to a -25% value. (See CRC-1, page 613 in Docket No. 080677-EI). Now, just a handful of years later, Mr. Allis finds it necessary to change the -25% net salvage by another 10 percentage points, or a 40% reduction ((25-15)/25=40%) from the existing value and a 57% reduction ((35-15)/35=57%) from the value reflected in customers' rates prior to the 2012 base rate change. Mr. Allis' proposal in this case again is based on historical averages, but is this time based on the "most recent five year average net salvage … and the most recent three year averages." (See Exhibit NWA-1, page 742). In other words, Gannett Fleming's simplistic approach, based on an unsubstantiated and incorrect assumption, reflects a 20 percentage point change in approximately a five year period. A 20 percentage point change in net salvage applied to FPL's proposed balance and remaining life for this

account would have a $19 million impact on annual revenue requirements, and a $128 million impact on the theoretical reserve imbalance.

Q. DOES MR. ALLIS CLAIM HE DID PERFORM AN ANALYSIS DEMONSTRATING THAT THE HISTORICAL RETIREMENT MIX IS REPRESENTATIVE OF THE CURRENT INVESTMENT MIX?

A. Yes, and Mr. Allis' claim is indicative of the quality of the underlying support and justification for depreciation parameters presented in this case. When requested in OPC's First Interrogatory No. 51 to

> identify and provide by account the analyses performed, if any, that demonstrates that the mix of investment reflected in the historical net salvage analysis is representative of the current mix of investment still in service. If no specific analysis was performed, explain and justify if and why the Company believes that the historical events are representative of future retirements

Mr. Allis responded by stating:

> As part of the 2016 Depreciation Study, the net salvage data for each account was reviewed for trends, transactions that were outside of the typical experience for the account, and for the type of investment in each account. Certain transactions or trends in the data were analyzed in more detail to determine the proper consideration for the estimation of net salvage. Please refer to Attachment No. 1 of this response for the analyses performed related to historical data transactions which were used to determine whether the historical mix of investment in the net salvage analysis was representative of the current mix of investment that is still in service. Additionally, please refer to the narratives discussing the estimation of net salvage provided in Part X and Part XI of Exhibit NWA-1, as well as the information provided in FPL's response to OPC's First Set of Production of Documents No. 38, for further discussion of the considerations and judgment incorporated into the estimation of net salvage and for further information.

Q. WHAT DOES ATTACHMENT NO. 1 OF THE RESPONSE TO OPC INTERROGATORY 51 STATE REGARDING ACCOUNT 368?

A. The following is Mr. Allis' entire presentation for Account 368– Distribution Line Transformers in the referenced Attachment 1:

> *Account 368 Line Transformers*
> **Question:** What caused the large cost of removal in 2013?
> **Response:** The large cost of removal in 2013 is primarily due to a true-up of transformer removal cost that actually occurred in prior periods. The data was not adjusted to prior periods, but averages were given more consideration in the net salvage analysis.

As can easily be identified in the above "analysis", there is not even a pretense of undertaking any meaningful, substantive or objective investigation of the historical data to determine if it is representative. Mr. Allis' approach leaves the accuracy of his proposals up to chance, rather than based on a sound foundation. Mr. Allis' approach, as practiced by Gannett Fleming and FPL, is partially responsible for the creation of a $215 million surplus reserve imbalance for this account alone.

Q. DOES THE REFERENCE TO PART XI OF EXHIBIT NWA-1 PROVIDE ANY ADDITIONAL INFORMATION REGARDING THE PREDICTIVE QUALITY OF THE HISTORICAL VALUES?

A. No. Part XI basically discusses the numerical results of averaging various historical time frames.

Q. DOES THE REFERENCE TO THE RESPONSE TO OPC'S FIRST SET OF PRODUCTION OF DOCUMENTS NO. 38 PROVIDE ANY ADDITIONAL

INFORMATION REGARDING THE PREDICTIVE QUALITY OF THE HISTORICAL VALUES?

A. Yes, but not supportive of Mr. Allis' "considerations and judgment incorporated into the estimation of net salvage." For example, part of Mr. Allis' "considerations and judgment incorporated into the estimation of net salvage" for Account 368 is the statement that there are "many more overhead transformers than pad mount (maybe 80% to 20%)." While this may be a reasonably accurate statement, it is precisely the type of statement that is surprising to an experienced depreciation analyst.

Depreciation analyses and estimations are made on dollars, not units. Had this statement been followed up with a statement that there are many more "dollars" of investment in pad mounted transformers than overhead transformers, maybe 60% to 40%, that would have placed the information in proper perspective and been appropriate. Unfortunately, that was not the case. While the quantity of assets may provide insight into mortality characteristics in certain instances, the "dollars" of investment at issue are by far the most critical component. This type of information and presentation is indicative of unreasonable and inappropriate analyses and estimations that highlight why the unsupported claims of judgment followed by conclusory statements as the bases for Mr. Allis' proposals are not credible.

Q. ARE THERE EXCEPTIONS TO THE OVERALL LACK OF MEANINGFUL INVESTIGATION PERFORMED BY MR. ALLIS AND FPL OF THE HISTORICAL DATA?

A. Yes and no. Specific and additional analyses were performed for cost of removal of Transmission poles and Distribution poles. (See OPC's First Set of Production of Documents No. 38, Attachments 5 and 6). However, the analyses for the most part miss the real issue as they generally address total cost and not the changing per unit cost. For example the Transmission pole analyses specifically states that its "Goal and Objective" is to provide support as to "why pole retirement costs have been increasing." (See OPC's First Set of Production of Documents No. 38, Attachment 5). The analysis continues by stating the fact that more poles have been removed annually and that the annual total cost of removal has increased for that reason. This is not the issue raised in the prior study nor is it particularly meaningful for depreciation purposes.

Half way into the study presentation, FPL's analysis finally begins to touch upon the actual issue, removal cost per pole, but still reflects an incomplete analysis. Notwithstanding the lack of proper focus, the analysis does help identify why the recent negative net salvage is more negative than it should be for predictive capabilities. FPL's analysis identifies that it has had to increase the use of outside contractors due to the increase in replacement activity associated with the storm hardening program. The analysis specifically identifies that there has been a 31% increase in outside contractor labor rates compared to FPL in-house costs. This over reliance on contractors is more of a temporary situation and supports my position that Mr. Allis' reliance on historical averages without knowledge of the underlying data can be, and often is, inappropriate. The analysis continues with a cursory reference to increased equipment costs, such as "often" needing cranes due to heavier poles. Unfortunately, that part of the analysis

again falls short. Just as permanent increases in labor reflect a timing difference between the numerator and denominator in the net salvage ratio calculation (current cost of removal divided by historical installation cost), so do increases in equipment costs. However, not all pole replacements require the larger cranes, nor does the analysis analyze prudent, efficient changes in future operations in reaction to such changes. Finally, the analysis highlights the failure to recognize the concept of economies of scale, which is discussed later.

C. Manipulation of Historical Data

Q. ARE MR. ALLIS' ANALYSES BASED ON THE ACTUAL COMPANY-SPECIFIC HISTORICAL DATA AS RECORDED ON FPL'S BOOKS?

A. No. Mr. Allis has modified FPL's actual historical data prior to performing his averaging process. Moreover, in some cases the modified historical data is different than the historical data Mr. Allis, as Gannett Fleming's behind the scenes person, relied upon in the prior depreciation study. Mr. Allis specifically removes some aspects, of sales, hurricane and reimbursement transactions based on his opinion that the values are "atypical or abnormal". (See OPC's First Interrogatory No. 44). In addition to those transactions specifically identified and provided for the first time in discovery, Mr. Allis also states that "other transactions that were not excluded from the data used for the statistical analyses may have been given less consideration in the life or net salvage analysis." (See OPC's First Interrogatory No. 44).

Q. WHAT ARE THE TOTAL AMOUNTS EXCLUDED BY MR. ALLIS FROM THE HISTORICAL DATA ON FPL'S BOOKS FOR TRANSMISSION, DISTRIBUTION AND GENERAL PLANT?

A. Mr. Allis excluded $384.1 million of retirements and $234.9 million of positive net salvage. (See OPC's First Interrogatory No. 44, Attachment 4). That means that prior to the net salvage analyses and estimation phases of the 2016 Study, Mr. Allis removed net salvage values that equated to a 61% level of positive net salvage recorded on FPL's books.

Q. WHAT ARE THE TOTAL AMOUNTS EXCLUDED BY MR. ALLIS FOR REIMBURSED RETIREMENTS?

A. Mr. Allis excluded $86.4 million of reimbursed retirements and $70 million of positive net salvage, which corresponds to an 81% level of positive net salvage. (See OPC's First Interrogatory No. 44, Attachment 4). Mr. Allis failed to demonstrate or justify that such transactions are non-reoccurring.

Q. IS THERE A PROBLEM WITH THE COMPANY'S DATA ASIDE FROM MR. ALLIS' MODIFICATION OF THE HISTORICAL DATABASE FOR REIMBURSED RETIREMENTS AND SUPPORT SHOWING THEY ARE NON-REOCCURRING?

A. Yes. The Company has previously stated that all contributions in aid of construction are "allocated between the cost of removal and additions based on the labor estimate for the job." (See OPCs First Depr. Interrogatories No. 28 in Docket No. 080677-El).

In other words, the Company contends that amounts received from third parties must be categorized as a contribution in aid of construction, with the intention of not booking such amounts as salvage.

Q. HAS THE COMPANY SUPPORTED ITS HISTORICAL PRACTICES?

A. No. In NARUC Interpretation No. 67, NARUC has identified how such amounts are to be treated. In particular, for any amount received from a third party to be considered as a contribution in aid of construction, it must specifically be designated as such on a *contractual basis*. The Company has failed to demonstrate that its election to allocate all amounts received from third parties as contributions in aid of construction complies with the NARUC Interpretation. In addition, it should be recognized that some companies have begun modifying contracts in order to change the character of the amounts received in association with reimbursement retirement activity. Such artificial modifications should not be allowed.

Q. WHAT DOES NARUC INTERPRETATION NO. 67 SPECIFICALLY STATE?

A. NARUC Interpretation No. 67 states the following:

> The cost of plant retirements should be accounted for in accordance with the rules applicable thereto. The cost of new plant should include in the appropriate plant accounts at actual cost of construction. The reimbursement received shall be accounted for (a) by crediting operation and maintenance expenses to the extent of actual expenses occasioned by the plant changes and (b) crediting the remainder to the reserve for depreciation, unless contractual terms definitely characterize residual or specific amounts as applicable to the cost of replacement. In the latter event, appropriate credits should be entered in the plant accounts.

Q. WHAT IS THE IMPACT OF THE PROPER TREATMENT OF REIMBURSED RETIREMENTS?

A. If amounts received from third parties are classified as gross salvage rather than contributions in aid of construction, it will result in a less negative level of net salvage and a reduction in annual depreciation expense. Such treatment does not change net plant or rate base currently. While reimbursed retirements may be over-represented in the historical data compared to what might transpire in the future, the full amount should not have been totally excluded from the database. Recognition of some level of reimbursed retirements in the estimation phase of a depreciation study would be appropriate, especially when reimbursed retirements occur on a continuous basis.

D. <u>Economies of Scale</u>

Q. IS FPL'S HISTORICAL NET SALVAGE DATABASE REPRESENTATIVE OF WHAT CAN REASONABLY BE ANTICIPATED IN THE FUTURE?

A. No. The Company's historical database, as it applies to net salvage, reflects a situation in which relatively few retirement dollars have occurred compared to the level of retirement activity that will occur in the future on an annual basis. In other words, in future years, as a greater level of the Company's investment approaches its ASL, a larger numbers of investments will retire on an annual basis. The greater level of annual retirements should result in a reduction to the per unit cost of removal as economies of scale are realized. Recognition of this concept belongs in the proper technique to be utilized in any depreciation analysis. By contrast, the Company's approach is more

reflective of an analysis of historical data without proper evaluation of future expectations.

Q. ARE YOU AWARE OF ANY SOURCES WHICH CONCUR WITH YOUR CONCEPT OF ECONOMIES OF SCALE?

A. Yes. In its publication "*Public Utility Depreciation Practices*" NARUC indicates, among other things, that while future cost of removal logically may be higher than past costs, this premise does not necessarily indicate that the percentage cost of removal will increase over time. Moreover, the publication acknowledges that as labor costs increase over time, so do the number of items to be removed, thus making it more economical in many cases to invest in special tools, which may actually result in an overall decrease in cost of removal per item removed. This rationale reflects the appropriate depreciation rates to be utilized in the future better than does FPL's blind reliance on history.

E. <u>Account Specific</u>

Account 353 – Transmission Station Equipment (Existing: -2%, FPL: -2%, OPC: 0%)

Q. WHAT IS THE COMPANY'S PROPOSAL FOR ACCOUNT 353 – TRANSMISSION STATION EQUIPMENT?

A. The Company proposes to retain the existing -2% net salvage. (See Exhibit NWA-1, page 709).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis performed a historic averaging of the Company's recorded data as currently reported. Mr. Allis notes that the overall *cost of removal* has been around 12% for the most recent 10- to 20-year averages, and most of the three-year moving averages range between 7% to 15%, especially in the last 20 years. (See Exhibit NWA-1, page 708). While accepting the Company's historic reported cost of removal, Mr. Allis notes some of the large gross salvage amounts in recent years were related to warranty retirements and reimbursements that he does not "expect" to be reoccurring activity for future experience of all the assets in the account. Mr. Allis goes on to note there has been a decrease in the level of gross salvage in the 1980s and 1990s while emphasizing lower levels of gross salvage in the last 10 to 20 years. Mr. Allis does identify the most recent period has seen higher gross salvage values on average. (See Exhibit NEW-1, page 709). From these items of information, Mr. Allis concludes that it is appropriate to retain the current approved -2% net salvage and then claims that if gross salvage returns to lower levels a more negative estimate may be appropriate in the future.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal ignores various pertinent facts. Therefore, I recommend a 0% level of net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. Mr. Allis has chosen to act somewhat inconsistently for this account compared to other accounts. Mr. Allis's normal approach is to rely on historical averages and perform

limited, if any, investigation of the underlying data. However, in this case Mr. Allis has chosen to: (1) investigate only what he perceives as unusual gross salvage levels, and (2) depart from relying on more current averages for the basis of his proposal. Alternatively, I have performed a more in-depth investigation of what is normally one of the main drivers of net salvage for this account. In addition, I have identified unusual modifications made to historical values, the impact of which is the creation of an artificial negative net salvage.

This account contains a wide array of assets, ranging from transformers to battery chargers to fuses. (See OPC's First Interrogatories No. 54 Attachment 1). The per unit cost of removal and gross salvage associated with the various assets will be different. Therefore, it is important to know if the historical database being analyzed for its predictive guidance for the remaining assets is representative. This is especially true if a simplistic averaging approach is employed, as is the situation with Mr. Allis' presentation.

Normally, transformers are the largest dollar category of assets in this account. In this case, transformers comprise approximately 25% of the investment in the account. However, transformers reflect only 10% of the retirement activity on a dollar basis during the past 10 years. (See OPC's First Interrogatories No. 70 Attachment 1 and Exhibit NWA-1, page 341). The underrepresentation of transformer retirements has resulted in a skewed result of a small negative value for the entire account. Transformers often can bring positive levels of net salvage due to copper content and

the lower per-unit cost of removal associated with dollar concentrated large assets. Gannett Fleming interview notes state that FPL even utilizes "specialized transformer contractors – contractors will salvage everything they can." (See OPC's First Production of Documents No. 38 Attachment 2). Unfortunately, this particular comment was never referenced in the 2016 Study, nor does it appear to have been factored into the process.

Notwithstanding the failure of this comment to reach the light of testimony, the year the Company reported the greatest level of transformer related retirement dollars, and the year in which the percent of transformer retirements to total retirements was the greatest for transformers, both resulted in a zero level of net salvage. (See OPC's First Interrogatories No. 70 Attachment 1 and Exhibit NWA-1, page 341). This relationship reinforces the fact that Mr. Allis' assumption that historical averaging is, by fiat, representative of the future is often not true, and when true only true by coincidence.

Another factor supporting my recommendation is the inconsistent treatment Mr. Allis afforded warranty retirement related net salvage. Mr. Allis believes that the gross salvage amounts related to retirements of assets under warranty and reimbursable to FPL, "are not expected to be typical of future experience for all the assets in the account." (See Exhibit NWA-1, page 709). While no single transaction in this account can be "expected to be typical of future experience for all the assets in the account", the singling out of only transactions that would reduce the level of negative net salvage (See OPC's First Interrogatories No. 51 Attachment 1 and Exhibit NWA-1 page 709)

is not a proper basis for inconsistently choosing not to rely on the results of his 5-year average value of zero or his recent three-year rolling averages that range from positive 1% to positive 5%.

In summary, given the under representation of transformer retirements to the mix of plant in service, the actual reported net salvage during the seven-year period subsequent to the last depreciation study, the inability of the Company to identify the level of overtime, contractor pay, emergency situations other than hurricanes, and the inconsistent reporting of data, either a 0% or slightly positive level of net salvage is warranted. Moreover, since the industry norm is to propose net salvage values in five percentage point increments, stopping the required upward adjustment at the 0% net salvage level is the most appropriate value at this point in time.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $1,191,149 reduction in annual depreciation expense.

Account 354 – Transmission Towers and Fixtures (Existing: -15%, FPL: -25%, OPC: -15%)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 354 – TRANSMISSION TOWERS AND FIXTURES?

A. The Company proposes to decrease (make more negative) the net salvage value of this account. The Company proposes a -25% net salvage versus the existing -15% net salvage. (See Exhibit NWA-1, page 712).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis performed his stock historical averaging of recorded data. While he identifies that there has been "relatively limited levels of retirement activity", he still relies on the averaging of the Company's historical database. Mr. Allis further suggests that it is reasonable to expect negative net salvage for this account and that it is consistent with the negative net salvage experienced for Transmission and Distribution line structures. Based on these various statements and reasons, Mr. Allis concludes that "a more gradual change is recommended for this study." (See Exhibit NWA-1, page 712). In other words, Mr. Allis chooses to recognize: (1) a -72% net salvage since 2009 for this account, (2) a -55% net salvage that he is proposing for Account 355 Transmission poles, and (3) a -100% net salvage that he is proposing for Account 364 Distribution Poles as the basis for creating a claim that he is gradually moving to a value more negative than the existing -15%.

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is based on limited data which is not representative of future expectations. Therefore, I recommend retaining the existing -15% net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. While Mr. Allis states there were relatively few retirements associated with this account, he fails to note that in the last 10 years the total dollar level of retirement activity has not even reached a level of 1% of the existing plant in service. (See Exhibit

NWA-1, page 354 and page 65). Indeed, in the last study Gannett Fleming found it necessary to identify the historic data as “sporadic”. (See CRC-1 page 510 in Docket No. 080677-EI). While there is additional retirement activity in the account, the pattern, materiality, and frequency of the data negate assigning any level of credibility to the predictive values Mr. Allis believes may be indicated therein based simply on an averaging process.

Indeed, when the historical data available is further investigated, it can be determined that it is not representative of future expectations and therefore lacks predictive credibility. For example, foundations comprise 30% of the investment in this account, yet in the recent years of additional retirement activity relied upon by Mr. Allis the retirement of foundations is reflected at a rate of 38% of the activity. (See OPC’s First Set of Interrogatories No. 73 Attachment and Exhibit NWA-1, page 344 for 2013 and 2014). It is to be expected that cost of removal associated with foundations is going to be disproportionately high in comparison to removal of towers above ground. Moreover, it is expected that some portion of transmission tower foundations can be abandoned in place and thus the historical data relied upon by Mr. Allis is inappropriate for predicting future net salvage values for the investment in this account.

Another factor for not adjusting the existing net salvage value is the temporary higher cost of dealing with outside contracts made necessary due to the storm hardening program. FPL states that outside contractor labor charges increased 31% more than FPL in-house labor rates during the past 10 years. (See OPC’s First Production of

Documents No. 38 Attachment 5). In other words, the limited recent retirement activity relied on by Mr. Allis for his proposed change not only lack materiality, it also lacks appropriate basis for predicting the long term expectations of what will transpire in the future.

For all the above noted reasons, the Company has not provided any credible basis to accept a value more negative than what has already been accepted by the Commission. Given that Gannett Fleming often recommends values less negative that -15% for this account, and the impact on the denominator in the net salvage calculation of the high cost of towers, a value less negative than the existing value is also a realistic possibility.

Q. WHAT IS THE IMPACT OF RETAINING THE EXISTING -15% NET SALVAGE?

A. The impact of my recommendation is a reduction of $1,018,685 in annual depreciation expense.

Account 355 – Transmission Poles and Fixtures (Existing: -50%, FPL: -50%, OPC: -40%)

Q. WHAT IS THE COMPANY'S PROPOSAL FOR ACCOUNT 355 – TRANSMISSION POLES AND FIXTURES?

A. The Company proposes to retain the existing -50% net salvage. (See Exhibit NWA-1, page 714).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis again relied on his standard averaging of historical data. In addition, Mr. Allis notes that removal of concrete poles typically requires a crane which will add costs above and beyond the higher cost of other equipment and increases in cost due to road closures, traffic control, safety requirements, and other factors. Offsetting such higher costs, Mr. Allis does recognize that concrete poles are more expensive to install and that it is reasonable to expect a similar ratio of net salvage to original cost due to higher installation costs. (See Exhibit NWA-1, page 714). Mr. Allis also notes that a portion of the increase in cost of removal is due to the volume of work that is performed in association with the storm hardening program and that once the program is complete it is FPL's expectations that such cost will moderate. Based on these various considerations, Mr. Allis concludes that the overall and more recent averages "are considered to provide a reasonable basis for the net salvage estimate for this account. While the expectation is that cost of removal should moderate when compared to recent years, the same could be expected for gross salvage." (See Exhibit NWA-1, page 714).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal fails to recognize the critical change in the type of assets in the account. Therefore, I recommend a -40% net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. While Mr. Allis does recognize that concrete poles cost more to install and thus should offset a percentage increase in cost of removal compared to costs involved associated with wood poles, he fails to properly analyze such differential. In this particular case, the historical averages Mr. Allis relies upon are heavily skewed to the retirement of wood poles. (See OPC's First Set of Interrogatories No. 77 Attachment). However, the vast majority of the investment in this account is now concrete poles. (See OPC's First Set of Interrogatories No. 76 Attachment). With this knowledge, an experienced depreciation analyst would investigate the segregation of cost of removal and gross salvage between concrete and wood poles in relationship to the corresponding dollar level of retirement activity. Had Mr. Allis performed such analysis, he would have realized that the Company's experienced a -39% net salvage rate for concrete poles and a -83% net salvage rate for wood poles. When these values are weighted between the corresponding 8% investment in wood poles and 92% investment in concrete poles, the net result is approximately -40%. (See OPC's First Set of Interrogatories Nos. 76 Attachment and 77 Attachment and OPC's Eighth Set of Interrogatories No. 220 Attachment). Moreover, an experienced depreciation analyst would not try and claim that the gross salvage was due to reimbursable events that are not expected to reoccur in the future, given the continuous and significant annual level that has transpired. (See NWA-1 page 346).

Another consideration for a less negative net salvage value is the recognition of the impact of the storm hardening program. This program has resulted in FPL retaining a disproportionate level of outside contractors to perform work. FPL further admits that

outside contractors charges have increased 31% more than in-house personnel in the last 10 years. When this temporary situation returns to normal, a less negative net salvage will be achieved for the same activities. (See OPC's First Production of Documents No. 38 Attachment 5). In addition, for the reasons stated in the Net Salvage General Section of my testimony, any reliance by Mr. Allis for a more negative net salvage than my recommendation based on the in-house analysis addressing why pole retirement costs were increasing is misplaced. (See OPC's First Production of Documents No. 38 Attachment 5).

In summary, proper analysis of the investment in this account would not rely on the combined historical averages recorded for concrete and wood poles by the Company. The historical averages heavily correspond to the retirement activity associated with wood poles when wood poles currently comprise approximately 8% of the investment in the account. Therefore, based on a more meaningful and appropriate analysis of the available information, a -40% net salvage is warranted.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $3,310,591 reduction in annual depreciation expense.

Account 356 – Transmission Overhead Conductors and Devices (Existing: -50%, FPL: -55%, OPC: -45%)

Q. WHAT IS THE COMPANY'S PROPOSAL FOR ACCOUNT 356 – TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES?

A. The Company proposes a -55% net salvage, which reflects a 10% increase from the existing 50% net salvage. (See Exhibit NWA-1, page 716).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis performed his standard historical averaging process. He noted that the results for the overall band were a -57% and that more recent bands have been fairly similar. He therefore concludes that the historical data supports a more negative net salvage than the proposed -50% value. (See Exhibit NWA-1, page 716).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is unsupported. Therefore, I recommend a nominal change to a -45% net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. This is yet another instance of blind reliance on historical averages without investigation of what is reflected in the historical values. In particular, for this account the concept of economies of scale must be taken into account. The Company has in excess of 32,000 miles of overhead conductors. (See OPC's First Set of interrogatories No. 79 Attachment). The annual level of retirement activity reflected in the Company's historical data is approximately 3/10th of one percent of the existing miles of transmission lines. In comparison, the average anticipated level of retirement activity would be in excess of six times that level based on the ASL proposed by the Company. (See NWA-1 page 715).

The historical retirement activity is indicative of inefficient removal costs given that it does not recognize or allow for the spreading of mobilization costs and other fixed costs over a greater quantity of retirement dollars when more units of conductor retire annually. The historical level of retirement activity yields a more negative level of net salvage than will realistically transpire when greater quantities of transmission overhead conductors and devices are retired in each year in the future.

Another measure of the excessively negative nature of the existing net salvage is the cost of removal ratio Mr. Allis removed from the database relating to hurricane activity. Based on recent hurricane-related retirement activity, a period during which FPL retired more Transmission conductor in just two years than during the next eight years combined, the cost of removal relationship was only 12%. (See OPC's First Set of interrogatories No. 79 Attachment, No. 44 Attachment 4, and No. 80 Attachment). Even if the entire hurricane related retirement activity removed by Mr. Allis is reviewed, the cost of removal relationship only increases to 20%. (See OPC's First Set of interrogatories No. 44 Attachment 4). In other words, if only the cost of removal associated with hurricane-related retirements, not net salvage which includes gross salvage, is analyzed as a period that reflects more realistic quantities of conductor being retired annually, the results demonstrate that the historical data Mr. Allis relied upon to propose a more negative net salvage is not representative of future retirements for this account. Moreover, the historical database relied upon by Gannett Fleming to increase the then existing negative net salvage from a -40% to a -50% in the prior case was also

excessively negative and cannot appropriately be allowed to form the basis for further movement into negative territory.

A final takeaway from the review of hurricane related retirement information is that it produced a cost of removal relationship much lower than proposed by Mr. Allis even though it was not performed under ideal conditions or without overtime cost. That would have to strongly imply that the remaining database Mr. Allis did rely upon to establish his proposed -55% net salvage cannot be representative of what will transpire in the future.

In addition, Gannett Fleming relied on an industry comparison in the last proceeding in order to support its proposed movement to a -50% net salvage. From an industry comparative standpoint, Mr. Allis' proposal of further movement to a -55% net salvage would place FPL's net salvage for this account in the top seven percent of companies with the most negative levels of net salvage, and approximately double the industry level of approximately a -20% to -30%, depending on whether the mean, medium or mode is used as established by Gannett Fleming's own internal database. (See Response AET-CCA-2015JUL10-009(a)(vii) Attachment 2 in Application 3527 before the Alberta Utilities Commission).

In summary, the type of activity reflected in the Company's historical database relied upon by Mr. Allis for his proposal is an inappropriate basis upon which to propose a more negative value than already exists. Proper interpretation of the available data

would warrant a reduction from the existing level of negative net salvage to a -40% or less negative level, but in no instance has the Company provided any credible basis for moving the existing negative net salvage level into more negative territory. My recommendation is conservative and reflects only a first step at this time.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $2,282,226 reduction in annual depreciation expense.

Account 362 – Distribution Station Equipment (Existing: -10%, FPL: -10%, OPC: -5%)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 362 – DISTRIBUTION STATION EQUIPMENT?

A. The Company proposes to retain the existing -10% net salvage. (See Exhibit NWA-1, page 726).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis relied on his standard averaging of historical values. Mr. Allis identified the overall average as a -10%. He further noted that more recent averages also indicate a net salvage of "close" to -10%. (See Exhibit NWA-1, page 726).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal overstates the level of negative net salvage. Therefore, I recommend a -5%.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. My recommendation relies on a better understanding of the values recorded by the Company. While Mr. Allis chose not to investigate the historical net salvage data, (See OPC's First Set of Interrogatories No. 51 Attachment), given the particular nature of the investment in this account, an experienced depreciation analyst would have investigated the retirement mix compared to the investment mix. In particular, transformers comprise the largest component of investment for the account at 37%. (See Response to OPC's First Set of Interrogatories No. 54 Attachment 1). Transformers are high dollar assets and normally result in a low negative net salvage percentage or even a positive net salvage. FPL even utilizes "specialized transformer contractors", and notes that these "contractors will salvage everything they can." (See OPC's First Production of Documents No. 38 Attachment 2).

Upon further investigation, it was determined that the retirement of transformers is underrepresented in the historical database during the past 10 years. In fact, recorded transformer retirements during the past 10 years represented only 19% of the retirement activity, while the investment in transformers is approximately twice that value. (See OPC's First Set of Interrogatories No. 54 Attachment 1 and OPC's Seventh Set of Interrogatories No. 188 Attachment 1.) This disproportional relationship has resulted in an overstatement of negative net salvage applicable to the investment in this account. However, the skewing of the historical data was not identified by Mr. Allis because he

simply assumed the historical averages would be representative, which they are not when actually tested.

A further indication of the overstatement of negative net salvage in the historic data due to the under representation of transformer retirements is that the only year during the past 10 years where the percentage retirement level of transformers exceeded the current percentage level of investment in transformers resulted in a positive net salvage. That situation occurred in 2010 when approximately half of the retirement activity recorded was associated with the retirement of transformers. (See OPC's Seventh Set of Interrogatories No. 188 Attachment 1).

Yet another consideration for a -5% net salvage recommendation is the fact that the actual recorded net salvage subsequent to the last depreciation study has been to a less negative level than was relied upon previously to establish the current -10% net salvage. In other words, there has been a trend to a lower level of negative net salvage than existed when the prior depreciation study was performed. (See Exhibit NWA-1, page 358 and Exhibit CRC-1, page 565 in Docket No. 080677-EI).

A final consideration for a less negative level of net salvage is the fact that the Company proposed a -2% net salvage for Transmission station equipment, basically the identical type of investment. As previously discussed, based on my analyses I recommended a 0% level of net salvage for the equivalent Transmission account. Whether the Company's proposed -2% or my 0% net salvage is adopted for Transmission

investment, either provides a strong indication that the existing -10% for Distribution station equipment is excessively negative and should be increased (made less negative.)

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $2,805,684 reduction in annual depreciation expense.

Account 364 – Distribution Poles, Towers and Fixtures (Existing: -60%, FPL: -100%, OPC: -60%)

Q. WHAT IS THE COMPANY'S PROPOSAL FOR ACCOUNT 364 – DISTRIBUTION POLES, TOWERS AND FIXTURES?

A. The Company proposes to change the existing -60% net salvage to -100%. This represents a 67% increase from the existing level and a 250% increase from the -40% net salvage that was in place prior to the Company's last depreciation study. (See Exhibit NWA-1, page 729).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company again relies on Mr. Allis' mechanical averaging of historical values as the main basis for its proposal. Mr. Allis notes that the overall band results in a -116% net salvage. Mr. Allis also notes that removal costs have trended higher and that gross salvage has trended lower due to disposal issues associated with chemically treated wood poles and the use of outside contractors who often net their charges with the net salvage that would normally be reported if the activity were done in-house. (See Exhibit NWA-1, page 729). While the historical net salvage has not been as low as -60% since

the early 2000s, Mr. Allis does note that he held discussions with Company management, identifying a number of reasons supporting the change in cost of removal during this time period. Company personnel also informed Mr. Allis that storm hardening activities have resulted in higher cost of removal and that such costs may moderate somewhat going forward. Mr. Allis continues by noting that there are other costs that will continue in place in the future, such as permitting, that will still result in a higher cost even after the storm hardening activities have moderated. Next, Mr. Allis notes that moderation in costs that may occur subsequent to when the storm hardening program is completed would be lower than the -200% that the Company has experienced recently. (See Exhibit NWA-1, page 730). Mr. Allis finally notes that the most recent data could support an estimate of -150%, but suggests that his recommendation is conservative compared to the historical data, and he offers that if the trend continues to more negative values such estimates will be modified in future studies. (See Exhibit NWA-1, page 730).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. As discussed below, this account is undergoing changes and the Company's proposal is not well-supported. Therefore, I recommend retaining the existing -60% net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. Before proceeding with establishing the basis for my recommendation, it is necessary to place the Company's request into proper perspective. In this case, the Company

seeks a 40 percentage point increase in net salvage above the existing -60%. Given that the net salvage calculation for Account 364 is based on a combination of subaccounts 364.1 and 364.2, wood poles and concrete poles combined into a single analysis, the Company's requested increase corresponds to $833 million of additional capital recovery to be charged to customers over the estimated remaining life of the investment. This proposed increase in capital recovery is about the same as adding a new Cape Canaveral combined cycle plant. (See Exhibit NWA-1, page 62). What is even more striking is that the Company's proposed -100% is 2.5 times the net salvage value FPL operated under prior to the last depreciation study. Therefore, up until approximately 2012 the capital recovery rate for net salvage associated with poles compared to the Company's proposal in this case represents a $1.25 billion difference in capital recovery amounts. A request of this magnitude is approximately the equivalent of seeking the addition of the entire Martin combined cycle plant which consists of three generating units. (See Exhibit NWA-1, page 60). Therefore, the appropriate level of justification for such a request would be one that clearly identifies the need for the substantial increase in capital recovery, and then supports, justifies and documents the basis for the request. Based on my review, the Company has failed to provide an adequate basis to support the level of increase in capital recovery it seeks.

Q. PLEASE CONTINUE WITH THE BASIS FOR YOUR RECOMMENDATION.

A. As previously established in the discussion of Account 355 – Transmission Poles, the cost of removal relationship of wood poles versus concrete poles can be dramatically different, as can the resulting net salvage percentage for each type of pole. There is no

reason to believe the situation is any different for this account. Therefore, reliance on historical averages for an account with major changes in the mix of assets is invalid.

In a further effort to test the credibility of the Company's reliance on historical recorded numbers as a valid basis for predicting the future, I identified through discovery that the Company's "use of contractors has been higher in recent years." (See OPC's First Set of Interrogatories No. 51 Attachment 1, pages 9-10). Therefore, both the Company and Mr. Allis were aware that the recent historical data relied upon reflected unusual cost levels of activity for contractors, but chose to gloss over this issue by lumping a general reference to contractor costs in with a string of other generalities as the bases for increasing "costs." (See Exhibit NWA-1 pages 728-729). This investigation further diminishes the credibility of relying on the historical database as a valid predictor of the future.

Another concern for reliance on the historic data as recorded is the fact that it reflects relatively few retirements on an annual basis compared to the number of poles in service. Even giving consideration to the increased number of pole replacements due to the storm hardening program, the annual level of retirement activity is lower than the number of poles that would be retired annually based on the ASL proposed by Mr. Allis. Therefore, as the entire population of poles age and approach the ASL for the group, there will be a significant increase in annual retirements of both poles and dollars invested in poles. This increase in annual retirements must by necessity reflect economies of scale to be gained in the future when larger numbers of poles are retired

in close proximity to each other compared to the removal of one or a few poles at a time as is more realistically reflected in the historical data.

Yet another factor recognized by Mr. Allis but not specifically identified as to how it was used, if used at all in his proposal, is the fact that concrete poles cost significantly more than wood poles. While it may also cost more to remove a concrete pole if a crane is required, as alluded to by the Company in discovery (See OPC's First Production of Documents No. 38 Attachment 6), the critical factor that it failed to demonstrate is whether the increase in cost of removal on a percent basis is greater than the increase in installation cost per pole on a percentage basis. In other words, the per-unit cost of removal should go down for concrete poles due to their proportionately higher capital installation costs.

Finally, while Mr. Allis simply assumed that the historical activity is representative of future events, the reality is that distribution poles present a wide array of complexity. To the extent a disproportionate number of the historical retirements reflect situations where the activity is near a major roadway, the resulting higher cost of removal is not indicative of the expected overall cost of removal relationship in the future for all poles. In addition, the amount of joint use of a pole with cable companies or telephone companies can have an impact on the overall cost of removal as is the case for other complexities that can and do transpire associated with pole removal. For example, assume two poles identical in cost and size but located in different portions of the Company's service territory are to be retired. Pole A is struck by lightning on Saturday

of a three-day holiday weekend at 2:00 a.m. during a severe storm. Given that the Company might not know the precise location of the pole that needs to be replaced or the specific terrain associated with reaching such pole, and with all efforts being performed at overtime pay levels, the cost of removal can be rather high compared to the future expected retirement of the majority of poles. Alternatively, Pole B is part of a section of line containing 30 poles that are to be retired at one time. The location of the 30 poles is directly next to one of the Company's service centers. All activities are to be performed on a planned basis with all material, equipment and personnel scheduled in advance. No overtime payments are anticipated. The mobilization costs for the removal of Pole A are nowhere near the mobilization costs associated with the retirement of Pole B. In addition, the overall concept of economies of scale are appreciably different. When a single pole is to be retired, all appropriate costs must be borne by only one retirement unit versus spreading many common costs to 30 poles that are retired at the same location and time frame.

In summary, the Company's proposal seeks a significant increase in capital recovery amounts. The level of support and justification presented by Mr. Allis as the basis of his proposal is inappropriate and unrealistic and no different than the last case where the Commission denied a similar request. The level of support pales in comparison to the dollar impact associated with an approach that simply assumes that averaging of historical events will, by fiat, capture the true weighted average of the different types of retirement events that will occur in the future. In addition to my recommendation to retain the existing -60% net salvage, I further recommend that the Commission order

the Company to perform a thorough and meaningful analysis of the type of retirement activity reflected in its historical database to the extent the Company elects to rely on such simplistic approach in the future. Further, I recommend the Company segregate its net salvage analyses between wood and concrete poles as it has done for the life analyses.

Q. GIVEN THE LACK OF CREDIBLE EVIDENCE TO SUPPORT A CHANGE IN NET SALVAGE VALUES, DID YOU PERFORM A REASONABLENESS CHECK OF YOUR RECOMMENDATION?

A. Yes. The normal practice is to perform a sanity check on proposed depreciation parameters, especially when there is limited credible information to support a change. Based on Gannett Fleming's internal database, my recommendation is equivalent to the mean, median and mode values. Alternatively, Mr. Allis' proposal would place FPL in a position where less than eight percent of other utilities would have a more negative net salvage value. (See Gannett Fleming's industry data provided in response to CEP 6-2 in Docket No. 44941 before the Public Utility Commission of Texas).

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $15,941,184 reduction for Account 364.1 and a corresponding reduction of $8,098,004 for Account 364.2.

Account 365 – Distribution Overhead Conductors and Devices (Existing: -60%, FPL: -80%, OPC: -60%)

Q. WHAT IS THE COMPANY'S PROPOSAL FOR ACCOUNT 365 – DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?

A. The Company again proposes a negative net salvage significantly greater than the industry average as well as the existing net salvage for this account. In the last proceeding, the Company sought to decrease (make more negative) the then existing -50% net salvage to a -100%, but the Commission adopted a -60%. In this case, the Company again proposes to significantly increase the level of negative net salvage from the existing level by proposing a -80% value. (See Exhibit NWA-1, page 732).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. The Company's basis is essentially the same as it was in the last case where it sought a major change without reasonable or adequate substantiation or justification. The Company's basis again defaults to a simplistic averaging of historic recorded values. As part of its overall averaging process, Mr. Allis identifies an overall band net salvage of -76%, a 10-year average of 129%, and a five-year average of -111%. (See Exhibit NWA-1, page 732). Mr. Allis expands his explanation for relying on the historical data, stating that the reason for the increased negative net salvage for this account lies in the fact that the costs reflect permitting requirements, safety requirements, and traffic control requirements. Mr. Allis further states that the possibility exists that the storm hardening program, which is adjacent to major roads, could be the cause for higher cost of removal, and when such program ends costs could possibly be moderated to a lower

negative level. From these observations, Mr. Allis states that the historical data supports a more negative net salvage than that approved by the Commission in the last proceeding and that his proposed -80% is slightly more than the overall average but is conservative when compared to the most recent averages. (See Exhibit NWA-1, page 732).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. As was the case in the last proceeding, the Company's presentation falls far short of support for such a major increase. I recommend retention of the existing -60% net salvage.

Q. PLEASE ADDRESS THE MAGNITUDE OF THE COMPANY'S REQUEST.

A. This account is the largest dollar account in the mass property category. The Company's request is based on applying a -80% net salvage to a $2.2 billion original cost value, which corresponds to a request for $1.8 billion of additional capital recovery to be collected from customers above and beyond the original cost of the investment itself. Indeed, this particular request results in a $45.5 million annual depreciation expense revenue requirement ($2.234 billion X 80% / 39.29 year composite remaining life). As previously noted for the Company's request associated with distribution poles, the Company's net salvage request for distribution overhead conductors and devices is the equivalent of the combined investment for the entire Fort Myers combined cycle plant plus the Manatee combined cycle plant. There can be no doubt that if the Company were to come to this Commission seeking a capital recovery amount

equivalent to two large combined cycle plants totaling $1.8 billion that all parties would not only be entitled to, but would demand substantial substantiation for such a request.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. I chose to investigate as much detail as is available associated with the historical recorded data that the Company presents as its basis for its request. As is the case for Account 364 previously discussed, the complexity and variability of potential retirements of investment in this account cannot simply be assumed to be properly reflected in the historical events that have occurred over the last 5, 10, or even 29 years, as they are not. While Mr. Allis would like us to believe that his request to the Company to explain why cost of removal has increased in recent years or why gross salvage has decreased for this account represents adequate investigation to establish the credibility of the historical database as an accurate predictor of future events, they do not. Such limited inquiries, and in particular the limited response from Company personnel cannot begin to be given any credibility as a valid basis for substantiating a $1.8 billion request for a capital recovery amount.

Q. WHAT SPECIFIC QUESTION AND RESPONSE DID MR. ALLIS INITIATE AND RECEIVE REGARDING COST OF REMOVAL?

A. Mr. Allis asked "Why has cost of removal increased in recent years?" The response from the Company is that

> Cost of removal has increased for many reasons that should be expected to continue, such as labor costs, equipment costs, permitting costs, and safety requirements. However a portion of the increase in cost could also

be due to the volume of work performed for storm hardening. Storm hardening work is more likely to occur near major roadways, which result in higher removal costs. For this reason, future cost of removal could moderate somewhat when compared to more recent years. All of these factors were considered in the estimation of net salvage.

(Emphasis added). (See OPC's First Interrogatories No. 51 Attachment 1).

Q. WHAT INQUIRY AND RESPONSE DID MR. ALLIS INITIATE AND RECEIVE REGARDING GROSS SALVAGE FOR THIS ACCOUNT?

A. Mr. Allis specifically asked "Why has gross salvage decreased for this account?" The Company responded by stating that

> The decrease in gross salvage is likely due to multiple factors. One is that scrap prices have been lower in some years. Another is there may be less copper in recent retirements. This trend should be expected to continue, as the overall historical database likely contains a higher percentage of copper than the current mix of investment. The other reason is the use of contractors has been higher in recent years and contactor charges are typically net charges (i.e., net of salvage)." (Emphasis added).
>
> (See OPC's First Interrogatories No. 51 Attachment 1).

Q. DID EITHER OF THESE TWO QUESTIONS AND RESPONSES SUBSTANTIATE IN ANY MANNER THE REQUESTED -80% NET SALVAGE?

A. No. In fact, it is striking what limited inquiry and investigation Mr. Allis was prepared to undertake for such a large request. What is more striking is FPL's unsubstantiated and for the most part meaningless response to such questions. Again, it is worthwhile recalling that the impact of the Company's request is a $1.8 billion request that customers pay in the future above and beyond the recovery of the original cost of the

investment. It is also worth noting that these responses are what the Company believes is reasonable as a response to discovery seeking the analysis performed that demonstrates the mix of investment reflected in the historical net salvage analysis is representative of the current mix of investment still in service. (See OPC's First Interrogatories No. 52). While the discovery request goes to the heart of the basis presented by the Company, whether the indication obtained from simplistic averaging of historical values is a valid predictor of the future, the response is dismissive from a supportable or factual basis. In other words, FPL and Mr. Allis believe that no analysis is necessary. No explanation or justification is offered beyond certain non-substantive phrases as "likely", "expected", and "could" coupled with essentially meaningless information. None of it comes close to being adequate to validate what the Company actually undertook to substantiate its foundational assumption: that the averaging of historical data is representative of future anticipated retirements.

Q. PLEASE FURTHER EXPLAIN THE BASIS FOR YOUR RECOMMENDATION IN LIGHT OF THE INFORMATION YOU HAVE IDENTIFIED.

A. As previously noted, the Company provided basically nothing other than the modified historical data as the basis for its proposal. I have investigated the values removed from the Company's historical database as well as the quantity and general type of retirement activity during the past decade in an attempt to determine whether the recorded data relied upon by Mr. Allis can reasonably be considered representative of the investment in the account as it will retire in the future. What I determined is that it is not.

First, this account contains 464.2 million linear feet of conductor. (See OPC's Seventh Interrogatories No. 198 Attachment 1). The Company has retired between 2.2 million linear feet and 9.5 million linear feet of conductor per year from 2005 through 2014. (See OPC's Seventh Interrogatories No. 199 Attachment 1). In other words, there is significant variance in the quantity of conductor retired per year. When the quantity of conductor retired by year varies both upward and downward year to year, and when the overall range from low to high during the past decade is as much as a factor of four (See OPC's Seventh Interrogatories No. 199 Attachment 1), there can be no realistic basis for assuming that a simplistic averaging of the data will produce a meaningful indication of future retirements.

In addition to the overall variance in linear feet retired by year, it is also significant that the quantity of conductor by size of conductor varies appreciably from year to year. Given that the Company has poles which carry such conductors ranging in height from 30 feet and under to those over 65 feet, one would expect that larger size conductors are placed on taller poles. The retirement effort associated with replacing conductor at 30 feet versus 70 feet should vary significantly. Again, the Company has not provided any information that could verify whether the mix of the size of conductor by year corresponding to the height of the pole upon which it resides is representative of future retirements equivalent to the current mix of investment in the account. This situation is further complicated by the attachments to the various poles, and the location of the poles upon which these conductors reside, all of which will cause a variance in cost of

removal and gross salvage, not amenable to the plain averaging approach used by Mr. Allis.

Yet another factor that demonstrates the excessively negative nature of the historical data is the overall limited length of conductor retired historically versus what will transpire in the future. During the past decade, the Company retired on average 4.4 million linear feet of conductor per year. (See OPC's Seventh Interrogatories No. 199 Attachment 1). When this annual level of historical retirements is compared to the current total level of conductors, it is easy to recognize that the future must reflect a substantially higher level of retirement activity. Indeed, at the retirement rate experienced during the past decade of 4.4 million feet per year, it would take over 100 years to complete the retirement of total 464.2 million feet currently in service. This compares to the Company's proposed 48-year ASL. When substantially greater levels of conductor retire annually, economies of scale should be achieved so as to reduce the per unit cost of retirement.

While the Company has not supported that a -80% net salvage is appropriate and realistic, it did provide information through discovery that is both understandable and demonstrates the excessive nature of the Company's request. As part of the Company's modification of the database prior to performing its net salvage analyses, it identified and removed hurricane-related retirements, cost of removal, and gross salvage. The initial expectation is that the removal of retirement and net salvage data associated with hurricane-related activity would benefit customers under the assumption that surely the

retirement activity under hurricane-related conditions would have to be some of the more costly activity that the utility could perform. However, that is not the case. The Company removed $12.3 million of retirements associated with hurricane activity but only removed a corresponding $7.3 million of cost of removal, or a 59% relationship. It defies credibility to recognize that the Company can retire and remove millions of linear feet of conductor under hurricane circumstances at a cost rate of 59%, but wants the Commission to believe that the a net 100% cost rate is "conservative" because it was obtained from a simplistic averaging of the overall historical database. (See Exhibit NWA-1, page 362 and OPC's Interrogatories No. 44 Attachment 4 for hurricane activity). Based on this information, even the retention of the -60% net salvage is excessive and the -50% net salvage I recommended in the prior depreciation proceeding would be more appropriate.

Yet another consideration that Mr. Allis failed to consider is the fact that the higher labor cost, higher permitting cost, and higher cost associated with traffic congestion are also applicable to the cost of new installations. As the cost of new installations are placed into plant in service and then ultimately retired, it effectively will increase the denominator in the net salvage calculation for such cost, completing, in effect, a catch up cycle to the extent there are truly incremental costs being incurred for cost of removal at this point in time. In other words, the impact of higher costs, new regulations, and so forth to the extent they truly are incremental from prior activity, will in the future level itself out as the installation costs that are increased in association with those activities ultimately retire.

Another aspect of the overall net salvage estimation phase of the depreciation study is a conformational check with industry expectations. This type of sanity check becomes more helpful when the Company's historical database is questionable, as it is in this proceeding. Reviewing Gannett Fleming's internal industry database yields the fact that the mean, median, and mode values are -40%, -40%, and -50%, respectively. (See Gannett Fleming's industry data provided in response to CEP 6-2 in Docket No. 44941 before the Public Utility Commission of Texas). Moreover, if the Commission were to adopt the Company's proposed -80% net salvage, it would place FPL in a position of being the third most negative listed utility out of 79 utilities. It is unreasonable to assume, as the Company has, that its historical database is representative given the sanity check just discussed.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation to retain the existing -60% net salvage level for the investment in this account results in an $11,371,415 reduction in annual depreciation expense.

Account 367.6 – Distribution Underground Conductors and Devices – Duct System (Existing: 0%, FPL: -5%, OPC: 0%)

Q. WHAT IS THE COMPANY'S PROPOSAL FOR ACCOUNT 367.6 – DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES – DUCT SYSTEM?

A. The Company again proposes a -5% net salvage as it did in its last depreciation study. However, the Commission adopted my recommendation for a 0% level of net salvage for the last proceeding. (See Exhibit NWA-1, pages 737-738).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. As was the case in the last proceeding, FPL relies on Mr. Allis' averaging of historical values. Mr. Allis states that the overall band reflects a -6% net salvage while the more recent 10- and 5-year bands yield -9% and -10%, respectively. Mr. Allis also states that "conductor in the duct system is often removed when replaced, as the conductor is pulled from the duct to make room for new conductor. Costs can also be higher due to traffic control and other requirements. When conductor is abandoned in place the Company has to cut the cable at each joint and intersection below grade. There is no gross salvage when cable is abandoned in place." (Emphasis added). (See Exhibit NWA-1, page 738). Mr. Allis then concludes that, based on the "data, as well as the Company's practices, a negative net salvage estimate is appropriate for this account."

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is no different than what the Commission denied in the last proceeding. Therefore, I recommend retention of the existing 0% net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. Mr. Allis's reliance on historical data is misplaced. The Company's policy is to abandon underground conductor "when possible". (See OPC's Seventh Interrogatories

No. 201(d)). While there are costs associated with abandoning conductor, such costs should be immaterial in comparison to the cost of the installation. Indeed, for the majority of the years reflected in the Company's database, the Company experienced a positive net salvage to a limited level of negative net salvage of 3% or less. (See Exhibit NWA-1, page 368).

In addition, for purposes of determining the level of net salvage, the appropriate interpretation of actual transactions should be that conductor is not pulled from conduit unless it can receive positive salvage, as would be the case for the $50 million of investment in copper conduit. Alternatively, when conductor is pulled and costs are incurred "to make room for new conductor," those costs should be assigned to the new installation rather than as cost of removal. In other words, absent the need to install the new conductor which is for the benefit of future use, the old conductor would be abandoned in place.

In summary, the Company has not shown that reliance on its historical database is appropriate as a valid predictor of future retirement activity. Indeed, it cannot demonstrate such situation given that its policy is to abandon conductor in place when possible and only chooses to pull conductor when it is necessary to install new conductor, changing the characteristics of the activity from cost of removal to cost of installation. In addition, when the 6 million linear feet of copper conductor remaining on the system is pulled and costs of removal are incurred, such costs should be offset with the scrap or reuse value of the copper. Therefore, the Company has not

demonstrated that the existing 0% net salvage is no longer valid. Indeed, a small positive net salvage may be warranted when the Company begins to properly account for its activities.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. My recommendation results in a $2,732,496 decrease in annual depreciation expense.

Account 369.1 – Distribution Services – Overhead (Existing: -85%, FPL: -125%, OPC: -85%)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369.1 – DISTRIBUTION SERVICES – OVERHEAD?

A. The Company again requests the Commission adopt a -125% net salvage. This is the same proposal made by the Company in the last proceeding and denied by the Commission. (See Exhibit NWA-1, page 743).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis on behalf of the Company performed his standard historical averaging. Based on Mr. Allis' review of the historical information he concludes that a more negative net salvage estimate is appropriate for this account, citing that the overall net salvage average was a -133%. In addition, Mr. Allis notes that almost every 3-year moving average has been at least -125% (See Exhibit NWA-1, pages 743-744).

In addition, Mr. Allis held discussions with Company personnel where management indicated that one of the reasons for the high removal cost is that overhead services are small in

> quantity but are often in hard to get at places with high safety factors involved. This is especially true around residential neighborhoods. The removal is often time consuming due to safety requirements. Often distribution services are stretched across roads in high residential areas and with the spring effect of conductor more manpower is required. Factors that influence cost of removal for other distribution line accounts, with permitting requirements, have also influenced the cost for this account.
>
> (See Exhibit NWA-1, page 744).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. As was the case in the last proceeding, the Company provides nothing other than the results of simplistic historical averaging without any supporting investigation of what is contained in its historical database. Therefore, I again recommend retaining the existing -85% net salvage.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. When the Commission denied the Company's request for a -125% in the last proceeding and adopted my -85% recommendation, it did so with the understanding that FPL would perform an analysis to determine why its cost of removal is increasing and whether it is possible for the Company to make internal changes that might mitigate the trend. The Commission found the Company's request far too drastic, apparently given the quantity and quality of support for the request. Unfortunately, the situation has not improved as the Company's presentation reflects the same approach and lack

of substantiation as was the case in the prior proceeding. While the Company's presentation in this proceeding does reference generalized statements regarding the quantity of services and locations in hard to get to places and more potential permitting costs, such generalized and unsupported information in no manner provides any meaningful additional support than what the Company presented in the last proceeding. Indeed, if anything, such comments raise the question as to whether even the existing -85% value is warranted.

For example, when the Company identifies small quantities of services, and assuming the Company means small dollar investment quantities for individual services, this raises the issue of economies of scale in the future when it is anticipated many more services will be retired in more concentrated areas. Economies of scale will result in lower per unit costs and therefore a less negative value of net salvage than reflected in the past.

In addition, the Company's statement that often the retired services are in hard to get to places with high safety factors involved raises questions as to the validity of the historical database as a predictor of the future. To the extent the historical activity contains a disproportionate level of those hard to get to and safety related retirements, it will significantly overstate the level of negative net salvage that will be incurred in the future when the more standard retirement of services might occur. The problem at hand is the Company has neither identified what the norm is, nor what constitutes "often" when it is assigned to hard to get places with safety factors. This is precisely

the type of information the Company should have provided if it had any desire to meet a reasonable burden of proof on its presentation.

Next, Mr. Allis' statement that "often" distribution services stretch across roads in high residential areas also implies a potential high level of variability. Indeed, there are undoubtedly services that don't cross any roads and are easy to access without any specific safety concerns. However, the Company chose not to provide any documentation as to the distribution of the different situations associated with the retirement of services. Mr. Allis simply assumed that his simplistic averaging of historical data will produce representative results.

Mr. Allis' general reference to other factors such as permitting requirements further raises the question about the proper allocation of costs between the cost of the new installation and retirement cost with replacement activity occurs. It would appear more appropriate to assign permitting cost requirements to installation costs rather than removal costs. However, the Company has not provided any specifics regarding how it specifically treats mobilization, permitting, and other fixed costs associated with a replacement work order.

The only factual information the Company provided during discovery demonstrates that a -125% net salvage is excessively negative and should not be adopted. That information is that the Company incurred approximately 117% negative net salvage associated with hurricane replacement retirement activity relating to the hurricanes that

occurred during 2005. (See OPC's First Interrogatories No. 44 Attachment 4). It is reasonable to expect that a more negative level of net salvage on a per unit basis will be incurred in relationship to retirement activity relating to hurricane damage. While the Company could not identify the level of overtime or contractor costs associated with cost of removal (See OPC's First Interrogatories Nos. 47 and 48), it would be highly improbable that the Company's retirement activity associated with retirement costs due to hurricane situations would not incorporate substantial levels of overtime and contractor costs. In other words, the -117% net salvage should be the most negative cost relationship expected under circumstances that are most definitely not indicative of what can be expected for most of the investment in the future.

Yet another area of available empirical data demonstrates the excessive negative nature of the Company's proposal. While the Company has removed reimbursed retirements from the net salvage analyses, it did so because of the gross salvage component of the calculation. The cost of removal associated with the reimbursed retirements would be at least indicative of the more reflective level of net salvage that would be incurred during non hurricane related situations. Review of the cost of removal compared to the retirement dollars for the past 10 years yields a -60% net salvage for such activities. (See OPC's First Interrogatories No. 44 Attachment 4 for reimbursed retirements).

Another consideration for again not adopting the Company's unsupported proposal is the fact that the industry still does not indicate a 125% negative net salvage is an appropriate value. Relying on the database presented by Mr. Allis in response to

discovery in this proceeding, the mean, median, and mode values range between a -40% and a -59%. (See OPC's First Production of Documents No. 41). The Company's proposal corresponds to a value ranging from approximately 2 to 3 times the median or mode industry values as reported by Gannett Fleming. While the industry data provided by Mr. Allis does identify three utilities with negative net salvage more negative than his proposed -125% value ratio, it also shows more utilities with values ranging from 0% to a -20%.

In summary, the Company has chosen not to provide any new specific data that would support its reoffering of a value that was denied by the Commission in the last proceeding. Indeed, when properly analyzed, the information provided indicates that even under hurricane-related conditions the Company does not on average experience a value as negative as that proposed by Mr. Allis. Moreover, when retirement activity that occurred on a more planned basis is reviewed, the average cost of removal, exclusive of any consideration of gross salvage, yields a -60% value. The items of empirical data clearly indicate that the Company's historic database is skewed and may contain excessive levels of overtime and contractor charges as well as other emergency situations. My recommendation to retain the existing level of net salvage is reasonable if not conservative in nature.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $4,953,744 to annual depreciation expense.

Accounts 370 & 370.1 – General Meters & AMI Meters (Existing: -30%, FPL: -30%, OPC: -20%)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 370 – DISTRIBUTION METERS AND ACCOUNT 370.1 – METERS – AMI?

A. The Company proposes to retain the existing negative 30% net salvage. (See Exhibit NWA-1, pages 748 and 749).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis performed his standard simplistic averaging of historical data for the combined meter accounts. While Mr. Allis notes that the overall average was a -20%, he also states that FPL "improved the process of recording cost of removal." Moreover, ever since the improvement in 2002, FPL has recorded "higher levels of cost of removal." (See Exhibit NWA-1, page 748). Based on this item of information, Mr. Allis then notes that the 2002-2014, most recent 10-year, and 5-year averages were -36%, -32% and -25%, respectively. Mr. Allis concludes from these items of information that the "historical data therefore does not provide reason to modify the net salvage estimate at this time." (See Exhibit NWA-1, page 748).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. The Company's proposal is excessively negative. Therefore, I recommend a negative 20% net salvage as a step towards a more realistic value.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. First, it is worth noting that unlike the last case, Mr. Allis failed to identify any industry comparative data when discussing his proposed negative net salvage. Had Mr. Allis identified the industry range as maintained by Gannett Fleming, exclusive of the FPL value, it would establish the current range as a positive 5% to negative 20%. (See OPC's First Production of Documents No. 41 Attachment 1). The current industry range represents a change in direction in the degree of negativity compared to Gannet Fleming's presentation in the last depreciation study of an industry range of 0% to -25%. (See CRC-1, page 635 in Docket No. 080677EI). In other words, any reference to industry values would draw attention to the outlier nature of Gannett Fleming's -55% proposal in the last depreciation study, as well as the excessively negative position of the proposed -30% value.

Given the industry-based point of reference, the simplistic averaging approach employed by Mr. Allis requires greater investigation in order to determine whether it is a valid predictor of the future. Investigation of the historical data identifies several concerns. First, all that Mr. Allis was willing to explain regarding the dramatic change in the recorded level of cost of removal beginning in 2002, is that the "Company improved the process for recording cost of removal." (Emphasis added). (See Exhibit NWA-1, page 748). This conclusory statement without any explanation, support or justification cannot be accepted as an "improvement" versus an error, especially when it sets FPL apart from the rest of the industry and the magnitude of the resulting impact. The impact of relying on a zero level of net salvage, which is effectively both the

industry average and FPL's average value prior to 2002, is an $18 million reduction in annual expense. (See Exhibit NWA-1, page 65 with a 0% net salvage for both meter accounts).

Assuming, *arguendo*, that post 2001 historical data is a valid starting point, it still does not justify a -30% net salvage value. While FPL could not provide the level of overtime or contractor performed work reflected in the historical data, it did provide some useful information. One of those items of information provided was the cost of removal associated with hurricane-related retirements. If the entire hurricane related retirement activity removed by Mr. Allis is analyzed, the resulting cost of removal relationship is 21%. (See OPC's First Set of interrogatories No. 44 Attachment 4). In other words, if only the cost of removal associated with hurricane-related retirements, not net salvage which includes gross salvage, is analyzed as a period that reflects possibly the harshest conditions under which to perform retirement activities, the results demonstrate that the historical data Mr. Allis relied upon to propose a more negative net salvage is not representative of future retirements for this account.

Another item of information provided by FPL was the cost of removal associated with reimbursed retirements. If the entire reimbursed retirement activity removed by Mr. Allis is analyzed, the resulting cost of removal relationship is 18%. (See OPC's First Set of interrogatories No. 44 Attachment 4). While it is most likely that the reimbursed retirement activities still reflect disproportionate levels of overtime and contractor work performance due to the meter change out program beginning in earnest in 2010 ((See

OPC's Seventh Set of interrogatories No. 204 Attachment 1), it reinforces the adoption of my recommendation as a more valid value than that proposed by FPL.

Another factor in support of my recommendation, if the historical database is to be given credence in conjunction with Mr. Allis' normal process, is the results obtained from the more recent data. The more recent data yields a -12% for 2014, and a -20% for both the most current 3-year average and the overall average.

In summary, not matter how the analysis is viewed for this account, a -30% net salvage is not warranted. While a less negative value, such as a -15% or a -10%, is more realistic at this time, I rely on gradualism and conservatism as the basis for a -20% recommendation.

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a combined reduction of $6,046,099 to annual depreciation expense for both Accounts 370 and 370.1. The individual impacts are $546,123 and $5,499,976 for Accounts 370 and 370.1, respectively.

Accounts 390 – General – Structures and Improvements (Existing: -5%, FPL: -10%, OPC: 10%)

Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 390 – GENERAL PLANT STRUCTURES AND IMPROVEMENTS?

A. The Company proposes to move from the current -5% net salvage to a negative 10% net salvage. (See Exhibit NWA-1, page 755).

Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

A. Mr. Allis performed his standard historical averaging process. However, Mr. Allis notes that "sales of buildings that occurred prior to the end of their useful lives have been excluded from the net salvage analysis." Mr. Allis continues by stating the "historical data suggests that a more negative net salvage is appropriate", and that "an estimate of (15) percent could be appropriate. However, a (10) percent estimate reflects that there could be some value of the Company's buildings once they reach the end of their useful lives." (See Exhibit NWA-1, page 755).

Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

A. No. I recommend a positive 10% net salvage as the first step towards proper recognition of the significant value associated with the Company's holdings in major office buildings or service centers.

Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

A. First, it is important to place the Company's investment in this account in proper perspective. Investment in this account can be owned or leased, which makes a difference in the level of net salvage that can be expected. Obviously, if the investment is in facilities owned by the Company, then at the time of retirement the Company can sell such facilities and obtain a positive net salvage. Alternatively, if the investment is

in leasehold improvements not owned by the Company, then at the end of the lease where such assets retire the Company most likely will not be able to sell such components, and thus not obtain positive net salvage, and in fact may incur negative levels of net salvage.

In this case, FPL owns a majority of its investment in this account. (See OPC's First Interrogatories No. 56 Attachment 1 and NWA-1 page 65). Therefore, a substantial level of positive net salvage is appropriate with a 55-year ASL as recommend by Mr. Allis. While the commercial real estate market in metropolitan areas normally exhibit positive levels of net salvage for older structures, FPL has specific data that demonstrates the same logic applies to its facilities. Indeed, the Company sold its general office in 2011 and received a 65% positive net salvage. (See OPC's First Interrogatories No. 57 Attachment 1). Therefore, my selection of a 10% positive net salvage as an initial step in this proceeding towards the recognition of the net salvage that large office buildings, service centers and general plant structures will have even after 50, 60, or 80 years of use or longer is appropriate. Moreover, 10% is a very conservative first step given that the Company's actual recent experience associated with the sale of general plant facilities is an average of a positive 74%. (See OPC's First Interrogatories No. 57 Attachment 1).

Q. PLEASE CONTINUE.

A. The Company's retirement activity that Mr. Allis utilized to produce the negative net salvage value he proposed is not associated with the sale of office building or service

centers, but rather with replacement of roofs, air conditioning systems, security systems, etc. (OPC's First Interrogatories No. 54 Attachment 1 and Exhibit NWA-1 page 755). Thus, Mr. Allis' proposal is predicated on retirement activity that is not reflective of the majority of the investment in the account. The Company's proposal simply fails to take into account that in just the past several years, it has sold seven general plant facilities, including its general office. To remove and ignore such transaction is wrong.

Reliance on proper judgment to blend the significant positive net salvage of buildings with the negative net salvage for the "interim retirements" such as roofs, A/C systems, etc., in order to eliminate intergenerational inequity and accomplish the goal of depreciation, requires a positive level of net salvage. Indeed, any realistic weighting of the positive net salvage for the major buildings with the negative net salvage for the "interim retirements" would yield a combined net salvage greater than my recommendation. For example, if the average 74% net salvage FPL has experienced for the sale of buildings recently were blended with the -11% net salvage experienced for other retirements on a 50%/50% basis, it would yield a positive 31.5% value, which is more positive than my recommendation. In fact, it would require a 25%/75% building/other assumption to result in the positive level of my recommendation, which is inconsistent with the dollar levels of retirement of building/other assets.

Q. DO YOU HAVE COMMENTS ON MR. ALLIS' STATEMENT THAT THE SALE OF BUILDINGS OCCURRED PRIOR TO THE END OF THEIR USEFUL LIVES AS A BASIS TO PROPOSE A NEGATIVE NET SALVAGE?

A. Yes. Mr. Allis is wrong. In fact his attempted logic on this issue is not only inconsistent with what the Company and he relies upon elsewhere, but it is also inconsistent with the USOA. First, the end of the useful service life of an asset is from the standpoint of the owner, not the asset for depreciation purposes. This is no different than what the Company does for vehicles. The Company retires vehicles long before the end of the vehicle's useful life, but at the end of the vehicle's useful life for FPL. The proper depreciation process captures such situation through the net salvage portion of the process. That process, which Mr. Allis fails to consistently apply within his own study, is the process recognized and required by the USOA. The USOA defines "*Service life"* as "the time between the date electric plant is includible in electric plant in service, or electric plant leased to others, and the date of its retirement." (Emphasis added).

Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

A. The standalone impact of my recommendation results in a reduction of $2,354,193 to annual depreciation expense.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes. However, to the extent I have not addressed an issue, method, procedures, or other matter relevant to the Company's proposals in its filed depreciation case, it should not be construed that I am in agreement with the Company's proposed issue, method, or

procedures. Additionally and as courtesy and in the interest of completeness due to the length of my testimony, I am attaching an additional Exhibit_(JP-2) that will contain electronic links to my workpapers and the supporting documentation referenced in my testimony. Due to the large size of these files the OPC has agreed that it will file the completed schedule for me with operational links shortly after the filing of my testimony and well in advance of the deadline for providing discovery to other parties and Staff.

CERTIFICATE OF SERVICE

Docket No. 160021-EI, et al (consolidated)

I HEREBY CERTIFY that a true and correct copy of the foregoing Direct Testimony & Exhibits of Jacob Pous has been furnished by electronic mail to the following parties on this 7th day of July, 2016:

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JACOB POUS, P.E.

PRESIDENT, DIVERSIFIED UTILITY CONSULTANTS, INC.

B.S. INDUSTRIAL ENGINEERING, M.S. MANAGEMENT

I graduated from the University of Missouri in 1972, receiving a Bachelor of Science Degree in Engineering, and I graduated with a Master of Science in Management from Rollins College in 1980. I have also completed a series of depreciation programs sponsored by Western Michigan University, and have attended numerous other utility related seminars.

Since my graduation from college, I have been continuously employed in various aspects of the utility business. I started with Kansas City Power & Light Company, working in the Rate Department, Corporate Planning and Economic Controls Department, and for a short time in a power plant. My responsibilities included preparation of testimony and exhibits for retail and wholesale rate cases. I participated in cost of service studies, a loss of load probability study, fixed charge analysis, and economic comparison studies. I was also a principal member of project teams that wrote, installed, maintained, and operated both a computerized series of depreciation programs and a computerized financial corporate model.

I joined the firm of R. W. Beck and Associates, an international consulting engineering firm with over 500 employees performing predominantly utility related work, in 1976 as an Engineer in the Rate Department of its Southeastern Regional Office. While employed with that firm, I prepared and presented rate studies for various electric, gas, water, and sewer systems, prepared and assisted in the preparation of cost of service studies, prepared depreciation and decommissioning analyses for wholesale and retail rate proceedings, and assisted in the development of power supply studies for electric systems. I resigned from that firm in November 1986 in order to co-found Diversified Utility Consultants, Inc. At the time of my resignation, I held the titles of Executive Engineer, Associate and Supervisor of Rates in the Austin office of R. W. Beck and Associates.

As a principal of the firm of Diversified Utility Consultants, Inc., I have presented and prepared numerous electric, gas, and water analyses in both retail and wholesale proceedings. These analyses have been performed on behalf of clients, including public utility commissions, throughout the United States and Canada.

I have been involved in over 400 different utility rate proceedings, many of which have resulted in settlements prior to the presentation of testimony before regulatory bodies. I am registered to practice as a Professional Engineer in many states.

UTILITY RATE PROCEEDINGS IN WHICH TESTIMONY HAS BEEN PRESENTED BY JACOB POUS

ALASKA		
ALASKA REGULATORY COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Beluga Pipe Line Company	P-04-81	Refundable Rates
Beluga Pipe Line Company	U-07-141	Depreciation
Kenai Nikiski Pipeline	U-04-81	Rate Base
ARIZONA		
ARIZONA CORPORATION COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Citizens Utilities Company	E-1032-93-111	Depreciation
ARKANSAS		
ARKANSAS PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Reliant Energy ARKLA	01-0243-U	Depreciation
CALIFORNIA		
CALIFORNIA PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Pacific Gas & Electric Company	App. No. 97-12-020	Depreciation, Net Salvage, and Amortization of True-Up
Pacific Gas & Electric Company	App. No. 02-11-017	Mass Property Salvage, Net Salvage, Mass Property Life, Life Analysis, Remaining Life, Depreciation
Pacific Gas & Electric Company	App. No. 12-11-009	Depreciation, Mass Property Net Salvage, Mass Property Life, Hydroelectric
Pacific Gas & Electric Company	App. No. 13-12-012	Depreciation, Life, Net Salvage
San Diego Gas & Electric Company		Value of Power Plants
Southern California Edison Company	App 02-05-004	Depreciation, Net Salvage
Southern California Edison Company	App 10-11-015	Mass Property Life and Net Salvage
Southern California Edison Company	App 13-11-003	Production Life Span, Decommissioning, Life, Net Salvage
Southern California Gas & San Diego Gas & Electric Company	Apps 10-12-005 & 10-12-006	Mass Property Life, Mass Property Net Salvage
CANADA		
ALBERTA ENERGY AND UTILITIES BOARD		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
AltaLink Management/ Transalta Utilities Corporation	App. Nos. 1279345 and 1279347	Depreciation
Epcor Distribution, Inc.	App. No. 1306821	Depreciation
Enmax Corporation	App. No. 1306818	Depreciation
Transalta Utilities Corporation	TFO Tariff App. 1287507	Depreciation

UtiliCorp Networks Canada (Alberta) Ltd.	App. No. 1250392	Depreciation
Atco Electric	App. No. 1275494	Depreciation
ALBERTA PUBLIC UTILITIES BOARD		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Alberta Power Limited	E 91095	Depreciation
Alberta Power Limited	E 97065	Depreciation
Canadian Western Natural Gas Company, Ltd.		Depreciation
Centra Gas Alberta, Inc.		Depreciation
Edmonton Power Company	E 97065	Depreciation
Edmonton Power Generation, Inc.	1999/2000	GUR Compliance, Depreciation
Northwestern Utilities, Ltd	E 91044	Depreciation
NOVA Gas Transmission, Ltd.	RE95006	Depreciation
TransAlta Utilities Corporation	E 91093	Depreciation
TransAlta Utilities Corporation	E 97065	Depreciation
TransAlta Utilities Corporation	App. No. 200051	Gain on Sale
ALBERTA UTILITIES COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
AltaGas Utilities	1606694	Life Analysis, Net Salvage
AltaLink Management, Ltd.	1606895	Life Analysis, Net Salvage
AltaLink Management, Ltd.	1608711	Life Analysis, Net Salvage
AltaLink Management, Ltd.	1611000-1	Life Analysis, Net Salvage
ATCO Gas	1606822	Life Analysis, Net Salvage
FortisAlberta	1607159	Life Analysis, Net Salvage
ATCO Electric	20272	Life Analysis, Net Salvage
NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES		
Newfoundland & Labrador Hydro		Depreciation, Life Analysis
Newfoundland Power, Inc.	2013/2014 GRA	Depreciation, Life Analysis, Net Salvage, ELG vs. ALG
NORTHWEST TERRITORIES PUBLIC UTILITIES BOARD		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Northwest Territories Power Corporation	1995/96 and 1996-97	Depreciation
Northwest Territories Power Corporation	2001	Depreciation
NOVA SCOTIA UTILITY AND REVIEW BOARD		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Nova Scotia Power, Inc.	M03665	Production Plant Life and Net Salvage (Inflation), Interim Retirements, Mass Property Life and Net Salvage, ELG vs. ALG, Remaining Life, Fully Accrued

COLORADO		
CONNECTICUT PUBLIC UTILITIES REGULATORY AUTHORITY		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Public Service Company of Colorado	14AL-0660E	Depreciation, Production Plant Decommissioning Costs, Interim Retirements, Life Analysis, Mass Property Net Salvage, Amortization of Reserve Differences
CONNECTICUT		
CONNECTICUT PUBLIC UTILITIES REGULATORY AUTHORITY		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Connecticut Natural Gas Co.	13-06-08	Depreciation, Life, Net Salvage
Connecticut Light & Power	14-05-06	Depreciation Life and Net Salvage
COURTS		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
7th Judicial Circuit Court of Florida	2008-30441-CICI	Depreciation Valuation
112th Judicial District Court of Texas	5093	Ratemaking Principles, Calculation of damages
253rd Judicial District Court of Texas	45,615	Ratemaking Principles, Level of Bond
126th Judicial District Court of Texas	91-1519	Ratemaking Principles, Level of Bond
172 Judicial District Court of Texas		Franchise Fees
United States Bankruptcy Court Eastern District of Texas	93-10408S	Level of Harm, Ratemaking, Equity for Creditors
3rd Judicial District Court of Texas		Adequacy of Notice
DISTRICT OF COLUMBIA		
PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Washington Gas Light Company	768	Depreciation
FLORIDA		
FLORIDA PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Progress Energy Florida, Inc.	090079-EI	Depreciation, Excess Reserve
Progress Energy Florida, Inc.	050078-EL	Depreciation, Excess Reserve
Florida Power & Light Company	790380-EU	Territorial Dispute
Florida Power & Light Company	080677-EI 090130-EI	Depreciation, Excess Reserve
Florida Power & Light Company	120015-EI	Excess Reserve
Florida Power & Light Company	120015-EI	Settlement Analysis
Tampa Electric Co.	13-0040-EI	Depreciation, Amortization
Gulf Power Co.	130140-EI	Depreciation
FEDERAL ENERGY REGULATORY COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Alabama Power Company	ER83-369	Depreciation

Connecticut Municipal Electric Energy Cooperative v. Connecticut Light & Power Company	EL83-14	Decommissioning
Florida Power & Light Company	ER84-379	Depreciation, Decommissioning
Florida Power & Light Company	ER93-327-000	Transmission Access
Georgia Power Company	ER76-587	Rate Base
Georgia Power Company	ER79-88	Depreciation
Georgia Power Company	ER81-730	Coal Fuel Stock Inventory, Depreciation
ISO New England, Inc.	ER07-166-000	Depreciation
Maine Yankee Atomic Power Company	ER84-344-001	Depreciation, Decommissioning
Maine Yankee Atomic Power Company	ER88-202	Decommissioning
Pacific Gas & Electric	ER80-214	Depreciation
Public Service of Indiana	ER95-625-000, ER95-626-000 & ER95-039-000	Depreciation, Dismantlement
Southern California Edison Company	ER81-177	Depreciation
Southern California Edison Company	ER82-427	Depreciation, Decommissioning
Southern California Edison Company	ER84-75	Depreciation, Decommissioning
Southwestern Public Service Company	EL 89-50	Depreciation, Decommissioning
System Energy Resource, Inc.	ER95-1042-000	Depreciation, Decommissioning
Vermont Electric Power Company	ER83 342000 & 343000	Decommissioning
Virginia Electric and Power Company	ER78-522	Depreciation, Rate Base
INDIANA		
INDIANA UTILITY REGULATORY COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Indianapolis Water Company	39128	Depreciation
Indiana Michigan Power Company	39314	Depreciation, Decommissioning
KANSAS		
KANSAS CORPORATION COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Arkansas Louisiana Gas Company	181,200-U	Depreciation
United Cities Gas Company	181,940-U	Depreciation
LOUISIANA		
LOUISIANA PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Louisiana Power & Light Company	U-16945	Nuclear Prudence, Depreciation
CITY OF NEW ORLEANS		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Entergy New Orleans, Inc.	UD-00-2	Rate Base, Depreciation
MASSACHUSETTS		
MASSACHUSETTS TELECOMMUNICATION AND ENERGY		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Bay State Gas	D.T.E.-0527	Depreciation
National Grid/KeySpan	07-30	Quality of Service

NSTAR	DPU 14-150	Depreciation
Fitchburg Gas & Electric (Electric)	15-80	Depreciation
Fitchburg Gas & Electric (Gas)	15-81	Depreciation
MISSISSIPPI		
MISSISSIPPI PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Mississippi Power Company	U-3739	Cost of Service, Rate Base, Depreciation
MONTANA		
MONTANA PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Montana Power Company (Gas)	90.6.39	Depreciation
Montana Power Company (Electric)	90.3.17	Depreciation, Decommissioning
Montana Power Company (Electric and Gas)	95.9.128	Depreciation
Montana-Dakota Utilities	D2007.7.79	Depreciation
Montana-Dakota Utilities	D2010.8.82	Depreciation, Interim Retirements, Production Plant Life and Net Salvage
Montana-Dakota Utilities	D2012.9.100	Depreciation
Montana-Dakota Utilities	D2015.6.51	Depreciation
NEVADA		
PUBLIC UTILITIES COMMISSION OF NEVADA		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Nevada Power Company	81-602, 81-685 Cons.	Depreciation
Nevada Power Company	83-667, Consolidated	Depreciation
Nevada Power Company	91-5032	Depreciation, Decommissioning
Nevada Power Company	03-10002	Depreciation
Nevada Power Company	08-12002	Depreciation, CWC
Nevada Power Company	06-06051	Depreciation, Life Spans, Decommissioning Costs, Deferred Accounting
Nevada Power Company	06-11022	General Rate Case
Nevada Power Company	10-02009	Production Life Spans
Nevada Power Company	11-06007	Early Retirement, Production Plant Net Salvage, Mass Property Life, Mass Property Net Salvage, Excess APFD
Sierra Pacific Gas Company	06-07010	Depreciation, Generating Plant Life Spans, Decommissioning Costs, Carrying Costs
Sierra Pacific Power Company	83-955	Depreciation (Electric, Gas, Water, Common)
Sierra Pacific Power Company	86-557	Depreciation, Decommissioning

Sierra Pacific Power Company	89-516, 517, 518	Depreciation, Decommissioning (Electric, Gas, Water, Common)
Sierra Pacific Power Company	91-7079, 80, 81	Depreciation, Decommissioning (Electric, Gas, Water, Common)
Sierra Pacific Power Company	03-12002	Allowable Level of Plant in Service
Sierra Pacific Power Company	05-10004	Depreciation
Sierra Pacific Power Company	05-10006	Depreciation
Sierra Pacific Power Company	07-12001	Depreciation, CWC
Sierra Pacific Power Company	10-06003	Depreciation, Excess Reserve, Life Spans, Net Salvage
Sierra Pacific Power Company	10-06004	Depreciation, Net Salvage
Sierra Pacific Power Company	12-08009	IRP-Coal Plant Service Life
Sierra Pacific Power Company	13-06004	Depreciation, Life, Net Salvage
Southwest Gas Corporation	93-3025 & 93-3005	Depreciation
Southwest Gas Corporation	04-3011	Depreciation
Southwest Gas Corporation	07-09030	Depreciation
Southwest Gas Corporation	12-04005	Depreciation
NORTH CAROLINA		
NORTH CAROLINA UTILITIES COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
North Carolina Natural Gas	G-21, Sub 177	Cost of Service, Rate Design, Depreciation
OKLAHOMA		
OKLAHOMA CORPORATION COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Arkansas Oklahoma Gas Corporation	PUD 200300088	CWC, Legal Expenses, Factoring, Cost Allocation, Depreciation
Oklahoma Natural Gas Company	PUD 980000683	Depreciation, Calculation Procedure, Depreciation on CWIP
Reliant Energy ARKLA	PUD 200200166	Depreciation, Net Salvage, Software Amortization
Public Service Company of Oklahoma	PUD 960000214	Depreciation, Interim Activity, Net Salvage, Mass Property, Rate Calculation Technique
Public Service Company of Oklahoma	PUD 200600285	Depreciation
Public Service Company of Oklahoma	PUD 200800144	Depreciation
Public Service Company of Oklahoma	PUD 201500208	Depreciation
Public Service Company of Oklahoma	PUD 201000050	Depreciation, Evaluation vs. Measurement, Interim and Terminal Net Salvage, Economies of Scale
Public Service Company of Oklahoma	PUD 201300217	Depreciation, Interim Retirements, Life Analysis, Net Salvage
Public Service Company of Oklahoma	PUD 201500208	Depreciation, Life Analysis, Net Salvage
Oklahoma Gas & Electric	PUD 201100087	Depreciation
Oklahoma Gas & Electric	PUD 201500273	Depreciation

SOUTH DAKOTA		
PUBLIC UTILITIES COMMISSION OF THE STATE OF SOUTH DAKOTA		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Montana-Dakota Utilities Co.	NG12-008	Depreciation
TEXAS		
PUBLIC UTILITY COMMISSION OF TEXAS		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
CenterPoint Energy Houston Electric, LLC	29526	Stranded Costs
CenterPoint Energy Houston Electric, LLC	36918	Hurricane Cost Recovery
CenterPoint Energy Houston Electric, LLC	38339	Depreciation, Net Salvage, Excess Reserve, Gain on Sale
Central Power & Light Company	6375	Depreciation, Rate Base, Cost of Service
Central Power & Light Company	8439	Fuel Factor
Central Power & Light Company	8646	Rate Base, Excess Capacity, Depreciation, Rate Design, Rate Case Expense
Central Power & Light Company	9561	Depreciation, Excess Capacity, Cost of Service, Rate Base, Taxes
Central Power & Light Company	11371	Economic Development Rate
Central Power & Light Company	12820	Nuclear Fuel and Process, OPEB, Pension, Factoring, Depreciation
Central Power & Light Company	14965	Depreciation, Cash Working Capital, Pension, OPEB, Factoring, Demonstration and Selling Expense, Non-Nuclear Decommissioning
Central Power & Light Company	22352	Depreciation
Central Telephone & United Telephone Company of Texas d/b/a Sprint	17809	Rate Case Expenses
City of Fredericksburg	7661	Territorial Dispute
El Paso Electric Company	9165	Depreciation
Entergy Gulf States, Inc.	16705	Depreciation, Prepayments, Payroll Expense, Pension Expense, OPEB, CWC, Transfer of T&D Depreciation
Entergy Gulf States, Inc.	21111	Reconcilable Fuel Costs
Entergy Gulf States, Inc.	21384	Fuel Surcharge
Entergy Gulf States, Inc.	23000	Fuel Surcharge
Entergy Gulf States, Inc.	22356	Unbundling, Competition, Cost of Service
Entergy Gulf States, Inc.	23550	Reconcilable Fuel Costs
Entergy Gulf States, Inc.	24336	Price to Beat
Entergy Gulf States, Inc.	24460	Implement PUC Subst.R.25.41(f)(3)(D)
Entergy Gulf States, Inc.	24469	Delay of Deregulation

Entergy Gulf States, Inc.	24953	Interim Fuel Surcharge
Entergy Gulf States, Inc.	26612	Fuel Surcharge
Entergy Gulf States, Inc.	28504	Interim Fuel Surcharge
Entergy Gulf States, Inc.	28818	Cert. for Independent Organization
Entergy Gulf States, Inc.	29408	Fuel Reconciliation
Entergy Gulf States, Inc.	30163	Interim Fuel Surcharge
Entergy Gulf States, Inc.	31315	Incremental Purchase Capacity Rider
Entergy Gulf States, Inc.	31544	Transition to Competition Cost
Entergy Gulf States, Inc.	32465	Interim Fuel Surcharge
Entergy Gulf States, Inc.	32710	River Bend 30%, Explicit Capacity, Imputed Capacity, IPCR, SGSF Operating Costs and Depreciation Recovery, Option Costs
Entergy Gulf States, Inc.	33687	Transition to Competition
Entergy Gulf States, Inc.	33966	Interim Fuel Surcharge
Entergy Gulf States, Inc.	32907	Hurricane Reconstruction
Entergy Gulf States, Inc.	34724	IPCR
Entergy Gulf States, Inc.	34800	JSP, Depreciation, Decommissioning, Amortization, CWC, Franchise Fees, Rate Case Exp.
Entergy Texas Inc.	37744	Depreciation, Property Insurance Reserve, Cash Working Capital, Decommissioning Funding, Gas Storage
Entergy Texas Inc.	39896	Depreciation, Amortization, Property Insurance Reserve, Cash Working Capital
Entergy Texas Inc.	41791	Nuclear License Extension, Fund After Tax Earnings, Nuclear Cost Escalation Factors
Gulf States Utilities Company	5560	Depreciation, Fuel Cost Factor
Gulf States Utilities Company	5820	Fuel Cost, Capacity Factors, Heat Rates
Gulf States Utilities Company	6525	Depreciation, Rate Case Expenses
Gulf States Utilities Company	7195 & 6755	Depreciation, Interim Cash Study, Excess Capacity, Rate Case Expense
Gulf States Utilities Company	8702	Rate Case Expenses, Depreciation
Gulf States Utilities Company	10,894	Fuel Reconciliation, Rate Case Expenses
Gulf States Utilities Company & Entergy Corporation	11292	Acquisition Adjustment Regulatory Plan, Base Rate, Rate Case Expenses
Gulf States Utilities Company & Entergy Corporation	12423	North Star Steel Agreement
Gulf States Utilities Company & Entergy Corporation	12852	Depreciation, OPEB, Pensions, Cash Working Capital, Other Cost of Service, and Rate Base Items
Houston Light & Power Company	6765	Depreciation, Production Plant, Early Retirement

Lower Colorado River Authority	8400	Rate Design
Magic Valley Electric Cooperative, Inc.	10820	Cost of Service, Financial Integrity, Rate Case Expenses
Oncor Electric Delivery, LLC	35717	Depreciation, Self-Insurance, Payroll, Automated Meters, Regulatory Assets, PHFU
Southwestern Bell Telephone Company	18513	Rate Case Expenses
Southwestern Electric Power Company	3716	Depreciation
Southwestern Electric Power Company	4628	Depreciation
Southwestern Electric Power Company	5301	Depreciation, Fuel Charges, Franchise Fees
Southwestern Electric Power Company	24449	Fuel Factor Component of Price to Beat Rates
Southwestern Electric Power Company	24468	Delay of Deregulation
Southwestern Electric Power Company	40443	Depreciation, Interim Retirements
Southwestern Public Service Company	11520	Depreciation, Cash Working Capital, Rate Case Expenses
Southwestern Public Service Company	32766	Depreciation Expense Revenue Requirements
Southwestern Public Service Company	35763	Depreciation
Southwestern Public Service Company	42004	Depreciation
Southwestern Public Service Company	43695	Depreciation
Texas-New Mexico Power Company	9491	Avoided Cost, Rate Case Expenses
Texas-New Mexico Power Company	10200	Jurisdictional Separation, Cost Allocation, Rate Case Expenses
Texas-New Mexico Power Company	17751	Rate Case Expenses
Texas-New Mexico Power Company	36025	Depreciation
Texas-New Mexico Power Company	38480	Depreciation, Mass Property Life, Net Salvage
Texas Utilities Electric Company	5640	Franchise Fees
Texas Utilities Electric Company	9300	Depreciation, Rate Base, Cost of Service, Fuel Charges, Rate Case Expenses
Texas Utilities Electric Company	11735	Cost Allocation, Rate Design, Rate Case Expenses
Texas Utilities Electric Company	18490	Depreciation Reclassification
West Texas Utilities Company	7510	Depreciation, Decommissioning, Rate Base, Cost of Service, Rate Design, Rate Case Expenses
West Texas Utilities Company	10035	Fuel Reconciliation, Rate Case Expenses
West Texas Utilities Company	13369	Depreciation, Payroll, Pension, OPEB, Cash Working Capital, Fuel Inventory, Cost Allocation
West Texas Utilities Company	22354	Depreciation

RAILROAD COMMISSION OF TEXAS		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Atmos Energy Corporation	9530	Gas Cost, Gas Purchases, Price Mitigation, Rate Case Expense
Atmos Energy Corporation	9670	CWC, Depreciation, Expenses, Shared Services, Taxes Other Than FIT, Excess Return
Atmos Energy Corporation	9695	Rate Case Expense
Atmos Energy Corporation	9762	Depreciation, O&M Expense
Atmos Energy Corporation	9732	Rate Case Expense
Atmos Energy Corporation	9869	Revenue Requirements
Atmos Energy Corporation	10041	Mass Property Life, Net Salvage
Atmos Energy Corporation	10170	Depreciation, Mass Property Life, Net Salvage
Atmos Pipeline-Texas	10000	Rate Base, Depreciation Life and Net Salvage, Incentive Compensation, Merit Increase, Outside Director Retirement Costs, SEBP
CenterPoint Energy Entex – City of Tyler	9364	Capital Investment, Affiliates
CenterPoint Energy Entex – Gulf Coast Division	9791	Rate Base, Cost Allocation, Affiliate Expenses, Depreciation Net Salvage, Call Center, Litigation, Uncollectibles, Post Test Year Adjustments
CenterPoint Energy Entex – City of Houston	9902	CWC, Plant Adjustments, Depreciation, Payroll, Pensions, Cost Allocation
CenterPoint Energy Entex – South Texas Division	10038	CWC, Incentive Compensation, Payroll, Depreciation
CenterPoint Energy – Beaumont/East Texas	10182	Rate Base, Expense, Incentive Compensation, Pension, Payroll, Injuries & Damages
CenterPoint Energy – Texas Coast Division	10007	Cost of Service Adjustment, CWC, ADIT, Incentive Compensation, Pension, Meter Reading, Customer Records and Collection, Investor Relations/Investor Services
CenterPoint Energy – Texas Coast Division	10097	Pension, Severance Expense
Energas Company	5793	Depreciation
Energas Company v. Westar Transmissions Company	5168 & 4892 Cons.	Cost of Service, Refunds, Contracts, Depreciation
Energas Company	8205	Cost of Service, Rate Base, Depreciation, Affiliate Transactions, Sale/Leaseback, Losses, Income Taxes

Energas Company	9002-9135	Depreciation, Pension, Cash Working Capital, OPEB, Rate Design
Lone Star Gas Company	8664	Cash Working Capital, Depreciation Expense, Gain on Sale of Plant, OPEB, Rate Case Expenses
Rio Grande Valley Gas Company	7604	Depreciation
Southern Union Gas Company	2738, 2958, 3002, 3018, 3019 Cons.	Cost of Service, Rate Design, Depreciation
Southern Union Gas Company	6968 Interim & Cons.	Affiliate Transactions, Rate Base, Income Taxes, Revenues, Cost of Service, Conservation, Depreciation
Southern Union Gas Company	8033 Consolidated	Acquisition Adjustment, Depreciation, Excess Reserve, Distribution Plant, Cost of Gas Clause, Rate Case Expenses
Southern Union Gas Company	8878	Depreciation, Cash Working Capital, Gain on Sale of Building, Rate Case Expenses, Rate Design
Texas Gas Service Company	9988 & 9992 Cons.	Cash Working Capital, Post Test Year Plant, ADFIT, Excess Reserve, Depreciation Expense, Amortization of General Plant, Corporate and Division Expenses, Incentive Compensation, Hotel and Meals Expense, Pipeline Integrity Costs
TXU Gas Distribution	9145-9147	Depreciation, Cash Working Capital, Revenues, Gain on Sale of Assets, Clearing Accounts, Over-Recovery of Clearing Accounts, SFAS 106, Wages and Salaries, Merger Costs, Intra System Allocation, Zero Intercept, Customer Weighting Factor, Rate Design
TXU Gas Distribution	9400	Depreciation, Net Salvage, Cash Working Capital, Affiliate Transactions, Software Amortization, Securitization, O&M Expenses, Safety Compliance
TXU Lone Star Pipeline	8976	Depreciation, Net Salvage, Cash Working Capital, ALG vs. ELG
Westar Transmissions Company	5787	Depreciation, Rate Base, Cost of Service, Rate Design, Contract Issues, Revenues, Losses, Income Taxes
TEXAS WATER COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
City of Harlingen-Certificate for Convenience & Necessity	8480C/8485C/8512C	Rate Impact for CCN
City of Round Rock	8599/8600M	Rate Discrimination, Cost of Service

Devers Canal System	8388-M	Affiliate Transactions, O&M Expense, Return, Allocation, Acquisition Adjustment, Retroactive Ratemaking, Rate Case Expenses, Depreciation
Devers Canal System	30102-M	Cost of Service, Rate Base, Ratemaking Principles, Affiliate Transactions
Southern Utilities Company	7371-R	Affiliate Transactions, Cost of Service
Scenic Oaks Water Supply Corporation	8097-G	Affiliate Transactions, Cost of Service, Rate base, Cost of Capital, Rate Design, Depreciation
Sharyland Water Supply vs. United Irrigation District	8293-M	Rate Discrimination, Cost of Service, Rate Case Expenses
Southern Water Corporation	2008-1811-UCR	Cost of Service
Travis County Water Control & Improv. District No. 20		Cost of Service
EL PASO PUBLIC UTILITY REGULATION BOARD		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
Southern Union Gas Company	1991	Depreciation, Calculation Procedure
Southern Union Gas Company	1997	Depreciation, Calculation Procedure
Southern Union Gas Company	GUD 8878 – 1998	Depreciation, Cash Working Capital, Rate Design, Rate Case Expenses
Texas Gas Services Company	2007	Revenue Requirements
Texas Gas Services Company	2011	Revenue Requirements
UTAH		
UTAH PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
PacifiCorp	98-2035-03	Production Plant Net Salvage, Production Life Span, Interim Additions, Mass Property, Depreciation
Questar	05-057-T01	Conservation Enabling Tariff Adjustment Option and Accounting Orders
Rocky Mountain Power	07-035-13	Depreciation
Rocky Mountain Power	13-035-02	Depreciation, Interim Additions, Production Plant Life Spans, Interim Retirements, Net Salvage, Mass Property Life
WYOMING		
WYOMING PUBLIC SERVICE COMMISSION		
JURISDICTION / COMPANY	DOCKET NO.	TESTIMONY TOPIC
PacifiCorp	20000-ER-00-162	Rate Parity

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	Probable Retirement Date (1)	Interim Retirement Rate/Curve (2)	Net Salvage (3)	Original Cost (4)	Book Reserve (5)	Future Accruals (6)=(100%-(3))x(4)-(5)	Composite Remaining Life (7)	Annual Depreciation Accruals (8)=(6)/(7)	Annual Depreciation Rate (9)=(8)/(4)	Annual Adjustment (10)=(4)-FPL $
STEAM PRODUCTION PLANT										
MANATEE STEAM PLANT										
MANATEE COMMON										
311 STRUCTURES AND IMPROVEMENTS	06-2028	0.0032	(1)	114,283,078	73,863,100	41,562,809	10.32	4,026,000	3.52	(1,404)
312 BOILER PLANT EQUIPMENT	06-2028	0.0094	(2)	7,864,883	1,419,252	6,602,929	9.98	661,495	8.41	12,877
314 TURBOGENERATOR UNITS	06-2028	0.0120	(1)	9,839,031	7,821,768	2,115,653	9.84	215,038	2.19	686
315 ACCESSORY ELECTRIC EQUIPMENT	06-2028	0.0052	(2)	9,833,462	7,455,585	2,574,547	10.21	252,077	2.56	(5,635)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2028	0.0071	0	2,498,111	1,956,325	541,786	10.11	53,596	2.15	(474)
TOTAL MANATEE COMMON				*144,318,565*	*92,516,029*	*53,397,724*	*10.25*	*5,208,206*	*3.61*	*6,050*
MANATEE UNIT 1										
311 STRUCTURES AND IMPROVEMENTS	06-2028	0.0032	(1)	6,968,574	5,629,219	1,409,041	10.32	136,487	1.96	(1,790)
312 BOILER PLANT EQUIPMENT	06-2028	0.0094	(2)	184,992,668	95,599,218	93,093,304	9.98	9,326,281	5.04	7,632
314 TURBOGENERATOR UNITS	06-2028	0.0120	(1)	74,066,121	43,199,871	31,606,911	9.84	3,212,574	4.34	42,372
315 ACCESSORY ELECTRIC EQUIPMENT	06-2028	0.0052	(2)	14,537,673	8,121,394	6,707,032	10.21	656,693	4.52	(2,151)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2028	0.0071	0	4,000,323	2,337,844	1,662,479	10.11	164,462	4.11	(794)
TOTAL MANATEE UNIT 1				*284,565,358*	*154,887,545*	*134,478,767*	*9.96*	*13,496,497*	*4.74*	*45,269*
MANATEE UNIT 2										
311 STRUCTURES AND IMPROVEMENTS	06-2028	0.0032	(1)	5,083,211	4,050,366	1,083,677	10.32	104,971	2.07	(1,064)
312 BOILER PLANT EQUIPMENT	06-2028	0.0094	(2)	187,516,002	89,627,110	101,639,212	9.98	10,182,428	5.43	38,794
314 TURBOGENERATOR UNITS	06-2028	0.0120	(1)	72,134,310	44,200,583	28,655,071	9.84	2,912,545	4.04	32,638
315 ACCESSORY ELECTRIC EQUIPMENT	06-2028	0.0052	(2)	12,511,249	6,482,959	6,278,515	10.21	614,736	4.91	(805)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2028	0.0071	0	3,520,594	1,720,389	1,800,204	10.11	178,086	5.06	(683)
TOTAL MANATEE UNIT 2				*280,765,366*	*146,081,407*	*139,456,679*	*9.97*	*13,992,766*	*4.98*	*68,880*
TOTAL MANATEE STEAM PLANT				***709,649,290***	***393,484,981***	***327,333,170***	*10.01*	***32,697,469***	*4.61*	***120,199***
MARTIN STEAM PLANT										
MARTIN COMMON										
311 STRUCTURES AND IMPROVEMENTS	06-2031	0.0032	(1)	241,400,701	161,452,115	82,362,593	13.21	6,235,622	2.58	(51,599)
312 BOILER PLANT EQUIPMENT	06-2031	0.0094	(2)	7,052,455	3,063,360	4,130,144	12.64	326,663	4.63	685
314 TURBOGENERATOR UNITS	06-2031	0.0120	(1)	27,411,866	15,382,397	12,303,587	12.41	991,705	3.62	12,120
315 ACCESSORY ELECTRIC EQUIPMENT	06-2031	0.0052	(2)	10,271,934	5,585,791	4,891,581	13.03	375,520	3.66	(4,852)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2031	0.0071	0	3,879,629	1,972,392	1,907,237	12.85	148,388	3.82	(965)
TOTAL MARTIN COMMON				*290,016,584*	*187,456,055*	*105,595,142*	*13.07*	*8,077,898*	*2.79*	*(44,611)*
MARTIN PIPELINE										
312 BOILER PLANT EQUIPMENT	06-2031	0.0094	0	370,942	370,942	-	12.21	-	0.00	
TOTAL MARTIN PIPELINE				*370,942*	*370,942*	-		-		-
MARTIN UNIT 1										
311 STRUCTURES AND IMPROVEMENTS	06-2031	0.0032	(1)	16,367,428	10,593,608	5,937,494	13.21	449,524	2.75	(4,066)
312 BOILER PLANT EQUIPMENT	06-2031	0.0094	(2)	212,347,651	91,195,080	125,399,524	12.64	9,918,161	4.67	(65,878)
314 TURBOGENERATOR UNITS	06-2031	0.0120	(1)	89,915,730	52,042,196	38,772,691	12.41	3,125,192	3.48	40,650
315 ACCESSORY ELECTRIC EQUIPMENT	06-2031	0.0052	(2)	24,335,747	14,796,849	10,025,614	13.03	769,653	3.16	(12,987)

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ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2031	0.0071	0	3,586,003	1,812,805	1,773,198	12.85	137,960	3.85	(788)
TOTAL MARTIN UNIT 1				*346,552,559*	*170,440,538*	*181,908,521*	*12.63*	*14,400,490*	*4.16*	*(43,069)*
MARTIN UNIT 2										
311 STRUCTURES AND IMPROVEMENTS	06-2031	0.0032	(1)	11,241,257	7,751,660	3,602,009	13.21	272,706	2.43	(3,310)
312 BOILER PLANT EQUIPMENT	06-2031	0.0094	(2)	214,665,917	88,354,502	130,604,734	12.64	10,329,854	4.81	(43,834)
314 TURBOGENERATOR UNITS	06-2031	0.0120	(1)	82,668,791	31,513,006	51,982,472	12.41	4,189,938	5.07	77,401
315 ACCESSORY ELECTRIC EQUIPMENT	06-2031	0.0052	(2)	22,992,823	12,504,334	10,948,345	13.03	840,490	3.66	(8,219)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2031	0.0071	0	3,273,365	1,424,241	1,849,124	12.85	143,867	4.40	(483)
TOTAL MARTIN UNIT 2				*334,842,153*	*141,547,743*	*198,986,684*	*12.61*	*15,776,855*	*4.71*	*21,555*
TOTAL MARTIN STEAM PLANT				***971,782,238***	***499,815,278***	***486,490,347***	***12.72***	***38,255,243***	***3.94***	***(66,125)***

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
SCHERER STEAM PLANT										
SCHERER COAL CARS										
312 BOILER PLANT EQUIPMENT	06-2039	0.0094	0	33,149,442	33,149,442	-	18.45	-	0.00	0
TOTAL SCHERER COAL CARS				*33,149,442*	*33,149,442*	-	*18.45*	-	*0.00*	-
SCHERER COMMON										
311 STRUCTURES AND IMPROVEMENTS	06-2039	0.0032	(1)	40,048,943	21,435,438	19,013,994	20.76	915,878	2.29	(3,561)
312 BOILER PLANT EQUIPMENT	06-2039	0.0094	(4)	26,275,279	12,672,090	14,654,201	19.33	758,208	2.89	(30,076)
314 TURBOGENERATOR UNITS	06-2039	0.0120	(1)	4,409,079	1,937,291	2,515,878	18.73	134,349	3.05	2,765
315 ACCESSORY ELECTRIC EQUIPMENT	06-2039	0.0052	(3)	1,246,718	704,489	579,630	20.30	28,556	2.29	(1,291)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2039	0.0071	(1)	3,720,892	1,817,682	1,940,418	19.86	97,710	2.63	(989)
TOTAL SCHERER COMMON				*75,700,910*	*38,566,991*	*38,704,121*	*20.01*	*1,934,701*	*2.56*	*(33,152)*
SCHERER COMMON UNIT 3 AND 4										
311 STRUCTURES AND IMPROVEMENTS	06-2039	0.0032	(1)	3,049,496	1,704,573	1,375,419	20.76	66,252	2.17	(387)
312 BOILER PLANT EQUIPMENT	06-2039	0.0094	(4)	22,708,658	10,156,498	13,460,506	19.33	696,446	3.07	(19,158)
314 TURBOGENERATOR UNITS	06-2039	0.0120	(1)	2,878,398	294,184	2,612,998	18.73	139,535	4.85	6,896
315 ACCESSORY ELECTRIC EQUIPMENT	06-2039	0.0052	(3)	2,865,605	303,887	2,647,686	20.30	130,440	4.55	1,410
TOTAL SCHERER COMMON UNIT 3 AND 4				*31,502,156*	*12,459,141*	*20,096,609*	*19.46*	*1,032,673*	*3.28*	*(11,239)*
SCHERER UNIT 4										
311 STRUCTURES AND IMPROVEMENTS	06-2039	0.0032	(1)	161,759,188	42,338,154	121,038,625	20.76	5,830,265	3.60	47,244
312 BOILER PLANT EQUIPMENT	06-2039	0.0094	(4)	682,720,321	193,672,542	516,356,592	19.33	26,716,264	3.91	(24,108)
314 TURBOGENERATOR UNITS	06-2039	0.0120	(1)	124,903,381	61,685,843	64,466,572	18.73	3,442,532	2.76	65,551
315 ACCESSORY ELECTRIC EQUIPMENT	06-2039	0.0052	(3)	50,198,264	15,152,821	36,551,391	20.30	1,800,725	3.59	(20,470)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2039	0.0071	(1)	5,202,651	2,391,381	2,863,297	19.86	144,181	2.77	(576)
TOTAL SCHERER UNIT 4				*1,024,783,804*	*315,240,741*	*741,276,477*	*19.54*	*37,933,967*	*3.70*	*67,641*
TOTAL SCHERER STEAM PLANT				***1,165,136,313***	***399,416,315***	***800,077,207***	***19.56***	***40,901,341***	***3.51***	***23,250***

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
SJRPP STEAM PLANT										
SJRPP COAL AND LIMESTONE										
311 STRUCTURES AND IMPROVEMENTS	06-2038	0.0032	(1)	3,538,786	1,868,163	1,706,011	19.83	86,042	2.43	(1,222)
312 BOILER PLANT EQUIPMENT	06-2038	0.0094	(4)	30,678,752	15,854,785	16,051,117	18.52	866,465	2.82	(65,115)
315 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0052	(3)	3,748,250	2,207,826	1,652,871	19.41	85,167	2.27	(4,908)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	0.0071	(1)	298,312	167,025	134,271	19.01	7,064	2.37	(194)
TOTAL SJRPP COAL AND LIMESTONE				*38,264,100*	*20,097,798*	*19,544,270*	*18.71*	*1,044,738*	*2.73*	*(71,439)*
SJRPP COAL CARS										
312 BOILER PLANT EQUIPMENT	06-2038	0.0094	0	52,105	52,105	-	17.10	-	0.00	0
TOTAL SJRPP COAL CARS				*52,105*	*52,105*	-	*17.10*	-	*0.00*	-
SJRPP COMMON										
311 STRUCTURES AND IMPROVEMENTS	06-2038	0.0032	(1)	33,324,991	22,656,892	11,001,349	19.83	554,850	1.66	(5,871)
312 BOILER PLANT EQUIPMENT	06-2038	0.0094	(4)	3,714,736	2,636,058	1,227,267	18.52	66,250	1.78	(3,960)
314 TURBOGENERATOR UNITS	06-2038	0.0120	(1)	2,511,326	1,735,626	800,814	17.98	44,543	1.77	(21)
315 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0052	(3)	5,865,107	4,091,638	1,949,422	19.41	100,448	1.71	(5,154)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	0.0071	(1)	1,607,470	1,035,943	587,602	19.01	30,913	1.92	(543)
TOTAL SJRPP COMMON				*47,023,630*	*32,156,157*	*15,566,454*	*19.53*	*797,004*	*1.69*	*(15,549)*
SJRPP GYPSUM AND ASH										
311 STRUCTURES AND IMPROVEMENTS	06-2038	0.0032	(1)	2,158,590	1,153,360	1,026,816	19.83	51,787	2.40	(575)
312 BOILER PLANT EQUIPMENT	06-2038	0.0094	(4)	16,972,048	9,823,711	7,827,219	18.52	422,526	2.49	(34,671)
315 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0052	(3)	52,223	32,591	21,199	19.41	1,092	2.09	(54)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	0.0071	(1)	153,866	67,155	88,249	19.01	4,643	3.02	(54)
TOTAL SJRPP GYPSUM AND ASH				*19,336,727*	*11,076,817*	*8,963,483*	*18.67*	*480,048*	*2.48*	*(35,354)*
SJRPP UNIT 1										
311 STRUCTURES AND IMPROVEMENTS	06-2038	0.0032	(1)	9,098,352	6,630,363	2,558,973	19.83	129,061	1.42	(1,900)
312 BOILER PLANT EQUIPMENT	06-2038	0.0094	(4)	100,163,072	52,036,605	52,132,990	18.52	2,814,223	2.81	(119,541)
314 TURBOGENERATOR UNITS	06-2038	0.0120	(1)	31,632,809	15,898,436	16,050,702	17.98	892,772	2.82	19,502
315 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0052	(3)	12,543,007	8,124,526	4,794,771	19.41	247,060	1.97	(11,418)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	0.0071	(1)	2,049,400	1,428,937	640,957	19.01	33,720	1.65	(777)
TOTAL SJRPP UNIT 1				*155,486,641*	*84,118,866*	*76,178,393*	*18.50*	*4,116,836*	*2.65*	*(114,134)*
SJRPP UNIT 2										
311 STRUCTURES AND IMPROVEMENTS	06-2038	0.0032	(1)	7,123,662	4,212,842	2,982,057	19.83	150,399	2.11	(2,449)
312 BOILER PLANT EQUIPMENT	06-2038	0.0094	(4)	89,481,419	41,170,858	51,889,818	18.52	2,801,096	3.13	(120,628)
314 TURBOGENERATOR UNITS	06-2038	0.0120	(1)	28,267,582	11,215,913	17,334,345	17.98	964,171	3.41	21,062
315 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0052	(3)	10,030,603	5,480,958	4,850,564	19.41	249,934	2.49	(13,112)
316 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	0.0071	(1)	1,560,108	895,106	680,603	19.01	35,806	2.30	(786)
TOTAL SJRPP UNIT 2				*136,463,375*	*62,975,676*	*77,737,387*	*18.50*	*4,201,406*	*3.08*	*(115,913)*
TOTAL SJRPP STEAM PLANT				***396,626,577***	***210,477,419***	***197,989,987***	***18.61***	***10,640,032***	***2.68***	***(352,389)***
TOTAL STEAM PRODUCTION				**3,243,194,417**	**1,503,193,994**	**1,811,890,711**	***14.79***	**122,494,085**	***3.78***	**(275,065)**

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FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
NUCLEAR PRODUCTION PLANT										
ST. LUCIE NUCLEAR PLANT										
ST. LUCIE COMMON										
321 STRUCTURES AND IMPROVEMENTS	04-2043	0.0028	(1)	397,119,196	177,004,050	224,086,338	24.43	9,170,886	2.31	(65,979)
322 REACTOR PLANT EQUIPMENT	04-2043	0.0056	(2)	55,584,107	31,607,489	25,088,300	23.54	1,065,951	1.92	(31,045)
323 TURBOGENERATOR UNITS	04-2043	0.00138	0	12,406,916	(7,437,954)	19,844,870	24.89	797,297	6.43	(124,862)
324 ACCESSORY ELECTRIC EQUIPMENT	04-2043	0.0012	(1)	34,379,626	16,953,508	17,769,914	24.95	712,280	2.07	(31,542)
325 MISCELLANEOUS POWER PLANT EQUIP.	04-2043	0.0032	(3)	20,728,941	2,303,180	19,047,629	24.31	783,654	3.78	(84,911)
TOTAL ST. LUCIE COMMON				*520,218,785*	*220,430,273*	*305,837,051*	*24.41*	*12,530,068*	*2.41*	*(338,339)*
ST. LUCIE UNIT 1										
321 STRUCTURES AND IMPROVEMENTS	03-2036	0.0028	(1)	196,854,866	101,666,896	97,156,519	17.78	5,463,230	2.78	(16,551)
322 REACTOR PLANT EQUIPMENT	03-2036	0.0056	(2)	845,363,775	303,976,050	558,295,000	17.32	32,238,915	3.81	(390,834)
323 TURBOGENERATOR UNITS	03-2036	0.00138	0	413,333,704	56,813,277	356,520,427	18.02	19,784,502	4.79	(1,849,019)
324 ACCESSORY ELECTRIC EQUIPMENT	03-2036	0.0012	(1)	120,786,348	50,666,363	71,327,849	18.05	3,951,646	3.27	(69,090)
325 MISCELLANEOUS POWER PLANT EQUIP.	03-2036	0.0032	(3)	11,438,745	7,097,019	4,684,888	17.72	264,427	2.31	(43,384)
TOTAL ST. LUCIE UNIT 1				*1,587,777,438*	*520,219,605*	*1,087,984,683*	*17.63*	*61,702,720*	*3.89*	*(2,368,878)*
ST. LUCIE UNIT 2										
321 STRUCTURES AND IMPROVEMENTS	04-2043	0.0028	(1)	298,911,837	133,449,793	168,451,163	24.43	6,893,979	2.31	(55,326)
322 REACTOR PLANT EQUIPMENT	04-2043	0.0056	(2)	1,057,336,501	401,479,217	677,004,014	23.54	28,764,532	2.72	(850,692)
323 TURBOGENERATOR UNITS	04-2043	0.00138	0	350,466,490	54,374,394	296,092,096	24.89	11,895,938	3.39	(1,780,371)
324 ACCESSORY ELECTRIC EQUIPMENT	04-2043	0.0012	(1)	189,637,025	86,957,686	104,575,709	24.95	4,191,757	2.21	(205,876)
325 MISCELLANEOUS POWER PLANT EQUIP.	04-2043	0.0032	(3)	24,225,433	11,438,960	13,513,236	24.31	555,959	2.29	(116,007)
TOTAL ST. LUCIE UNIT 2				*1,920,577,286*	*687,700,050*	*1,259,636,218*	*24.08*	*52,302,165*	*2.72*	*(3,008,272)*
TOTAL ST. LUCIE NUCLEAR PLANT				***4,028,573,509***	***1,428,349,928***	***2,653,457,952***	***20.97***	***126,534,953***	***3.14***	***(5,715,489)***
TURKEY POINT NUCLEAR PLANT										
TURKEY POINT COMMON										
321 STRUCTURES AND IMPROVEMENTS	04-2033	0.0028	(1)	380,704,673	186,854,084	197,657,636	15.00	13,173,787	3.46	22,913
322 REACTOR PLANT EQUIPMENT	04-2033	0.0056	(2)	144,884,580	25,644,014	122,138,257	14.67	8,323,040	5.74	(8,355)
323 TURBOGENERATOR UNITS	04-2033	0.00138	0	22,821,886	5,761,407	17,060,479	15.17	1,124,562	4.93	(87,981)
324 ACCESSORY ELECTRIC EQUIPMENT	04-2033	0.0012	(1)	56,769,858	34,483,980	22,853,576	15.19	1,504,322	2.65	(16,209)
325 MISCELLANEOUS POWER PLANT EQUIP.	04-2033	0.0032	(3)	39,215,641	17,765,783	22,626,327	14.96	1,512,775	3.86	(54,145)
TOTAL TURKEY POINT COMMON				*644,396,638*	*270,509,268*	*382,336,275*	*14.91*	*25,638,486*	*3.98*	*(143,777)*
TURKEY POINT UNIT 3										
321 STRUCTURES AND IMPROVEMENTS	07-2032	0.0028	(1)	185,601,316	40,968,915	146,488,414	14.29	10,254,301	5.52	38,930
322 REACTOR PLANT EQUIPMENT	07-2032	0.0056	(2)	595,235,354	176,726,668	430,413,393	13.99	30,770,592	5.17	(172,139)
323 TURBOGENERATOR UNITS	07-2032	0.00138	0	758,820,503	99,120,406	659,700,097	14.44	45,696,501	6.02	(3,061,821)
324 ACCESSORY ELECTRIC EQUIPMENT	07-2032	0.0012	(1)	153,810,948	73,799,057	81,550,000	14.46	5,641,375	3.67	(53,457)
325 MISCELLANEOUS POWER PLANT EQUIP.	07-2032	0.0032	(3)	16,088,188	890,397	15,680,437	14.24	1,100,921	6.84	(24,739)
TOTAL TURKEY POINT UNIT 3				*1,709,556,309*	*391,505,443*	*1,333,832,341*	*14.27*	*93,463,690*	*5.47*	*(3,273,226)*
TURKEY POINT UNIT 4										
321 STRUCTURES AND IMPROVEMENTS	04-2033	0.0028	(1)	129,681,130	50,771,975	80,205,966	15.00	5,345,689	4.12	12,846
322 REACTOR PLANT EQUIPMENT	04-2033	0.0056	(2)	518,893,111	190,785,224	338,485,749	14.67	23,065,912	4.45	(149,846)

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
323 TURBOGENERATOR UNITS	04-2033	0.00138	0	601,429,270	92,161,742	509,267,528	15.17	33,568,974	5.58	(2,396,247)
324 ACCESSORY ELECTRIC EQUIPMENT	04-2033	0.0012	(1)	177,722,654	105,343,398	74,156,482	15.19	4,881,304	2.75	(69,062)
325 MISCELLANEOUS POWER PLANT EQUIP.	04-2033	0.0032	(3)	12,121,306	279,921	12,205,024	14.96	816,016	6.73	(21,666)
TOTAL TURKEY POINT UNIT 4				*1,439,847,471*	*439,342,260*	*1,014,320,749*	*14.99*	*67,677,895*	*4.70*	*(2,623,975)*
TOTAL TURKEY POINT NUCLEAR PLANT				***3,793,800,418***	***1,101,356,971***	***2,730,489,365***	***14.62***	***186,780,071***	***4.92***	***(6,040,978)***
TOTAL NUCLEAR PRODUCTION PLANT				**7,822,373,927**	**2,529,706,899**	**5,383,947,317**	***17.18***	**313,315,024**	***4.01***	**(11,756,467)**

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
COMBINED CYCLE PRODUCTION PLANT										
LAUDERDALE COMBINED CYCLE PLANT										
LAUDERDALE COMMON										
341 STRUCTURES AND IMPROVEMENTS	06-2038	0.0023	(2)	87,455,288	58,653,734	30,550,660	20.02	1,526,258	1.75	(491,619)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2038	0.0095	(3)	11,879,795	6,764,061	5,472,128	18.50	295,730	2.49	(82,964)
343 PRIME MOVERS - GENERAL	06-2038	0.0057	(3)	29,161,926	7,732,618	22,304,165	19.30	1,155,519	3.96	(359,710)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2038	0.0057	35	37,564,239	8,857,045	15,559,710	19.30	806,107	2.15	(1,526,683)
344 GENERATORS	06-2038	0.0016	(3)	702,078	422,319	300,821	20.16	14,919	2.12	(5,176)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0013	(2)	12,506,640	9,717,936	3,038,837	20.23	150,238	1.20	(60,500)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	*0.0026*	(2)	1,273,681	642,012	657,142	19.95	32,933	2.59	(12,325)
TOTAL LAUDERDALE COMMON				*180,543,646*	*92,789,726*	*77,883,463*	*19.56*	*3,981,704*	*2.21*	*(2,538,977)*
LAUDERDALE UNIT 4										
341 STRUCTURES AND IMPROVEMENTS	06-2038	0.0023	(2)	5,252,477	3,609,977	1,747,550	20.02	87,305	1.66	(28,197)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2038	0.0095	(3)	695,047	531,831	184,067	18.50	9,948	1.43	(2,861)
343 PRIME MOVERS - GENERAL	06-2038	0.0057	(3)	130,963,584	56,698,998	78,193,494	19.30	4,050,996	3.09	(1,394,233)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2038	0.0057	35	64,498,883	10,698,975	31,225,299	19.30	1,617,699	2.51	(3,253,642)
344 GENERATORS	06-2038	0.0016	(3)	29,715,225	21,249,930	9,356,751	20.16	464,037	1.56	(168,176)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0013	(2)	30,758,543	20,012,939	11,360,776	20.23	561,668	1.83	(218,070)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	*0.0026*	(2)	2,681,785	1,971,609	763,812	19.95	38,279	1.43	(15,854)
TOTAL LAUDERDALE UNIT 4				*264,565,545*	*114,774,258*	*132,831,749*	*19.45*	*6,829,932*	*2.58*	*(5,081,033)*
LAUDERDALE UNIT 5										
341 STRUCTURES AND IMPROVEMENTS	06-2038	0.0023	(2)	3,304,988	2,032,622	1,338,465	20.02	66,867	2.02	(21,422)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2038	0.0095	(3)	766,036	526,298	262,719	18.50	14,198	1.85	(3,896)
343 PRIME MOVERS - GENERAL	06-2038	0.0057	(3)	130,296,359	36,892,592	97,312,658	19.30	5,041,509	3.87	(1,730,423)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2038	0.0057	35	24,422,478	2,046,912	13,827,699	19.30	716,376	2.93	(1,281,846)
344 GENERATORS	06-2038	0.0016	(3)	32,777,731	23,372,190	10,388,873	20.16	515,224	1.57	(183,893)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2038	0.0013	(2)	25,710,169	16,111,822	10,112,550	20.23	499,957	1.94	(190,791)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2038	*0.0026*	(2)	1,868,250	1,335,399	570,216	19.95	28,577	1.53	(11,807)
TOTAL LAUDERDALE UNIT 5				*219,146,010*	*82,317,834*	*133,813,180*	*19.44*	*6,882,708*	*3.14*	*(3,424,078)*
TOTAL LAUDERDALE COMBINED CYCLE PLANT				***664,255,201***	***289,881,818***	***344,528,392***	***19.47***	***17,694,344***	***2.66***	***(11,044,088)***

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
FT. MYERS COMBINED CYCLE PLANT										
FT. MYERS COMMON										
341 STRUCTURES AND IMPROVEMENTS	06-2048	0.0023	(2)	9,369,835	2,084,625	7,472,607	29.43	253,909	2.71	(54,494)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2048	0.0095	(3)	843,138	299,079	569,353	26.08	21,830	2.59	(13,644)
343 PRIME MOVERS - GENERAL	06-2048	0.0057	(3)	3,966,235	1,207,202	2,878,020	27.85	103,345	2.61	(21,137)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2048	0.0057	35	441,577	232,703	54,322	27.85	1,951	0.44	(7,926)
344 GENERATORS	06-2048	0.0016	(3)	244,993	16,476	235,866	29.76	7,927	3.24	(1,704)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2048	0.0013	(2)	1,235,229	156,637	1,103,296	29.90	36,905	2.99	(8,951)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2048	*0.0026*	(2)	816,343	214,351	618,319	29.29	21,110	2.59	(6,767)
TOTAL FT. MYERS COMMON				*16,917,349*	*4,211,074*	*12,931,783*	*28.93*	*446,977*	*2.64*	*(114,623)*
FT. MYERS UNIT 2										
341 STRUCTURES AND IMPROVEMENTS	06-2048	0.0023	(2)	30,529,035	12,785,207	18,354,408	29.43	623,659	2.04	(124,889)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2048	0.0095	(3)	6,577,101	2,145,941	4,628,474	26.08	177,463	2.70	(26,435)
343 PRIME MOVERS - GENERAL	06-2048	0.0057	(3)	408,864,986	89,323,988	331,806,947	27.85	11,914,592	2.91	(2,631,964)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2048	0.0057	35	296,494,183	44,886,481	147,834,738	27.85	5,308,480	1.79	(16,690,737)
344 GENERATORS	06-2048	0.0016	(3)	60,821,751	20,599,902	42,046,501	29.76	1,413,052	2.32	(346,952)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2048	0.0013	(2)	59,067,995	26,786,316	33,463,039	29.90	1,119,340	1.90	(314,995)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2048	*0.0026*	(2)	3,758,288	1,722,265	2,111,189	29.29	72,077	1.92	(22,851)
TOTAL FT. MYERS UNIT 2				*866,113,339*	*198,250,100*	*580,245,296*	*28.13*	*20,628,663*	*2.38*	*(20,158,823)*
FT. MYERS UNIT 3										
341 STRUCTURES AND IMPROVEMENTS	06-2048	0.0023	(2)	10,700,878	1,890,178	9,024,718	29.43	306,648	2.87	(56,520)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2048	0.0095	(3)	13,754,446	2,575,626	11,591,454	26.08	444,435	3.23	(47,145)
343 PRIME MOVERS - GENERAL	06-2048	0.0057	(3)	168,674,571	(2,356,862)	176,091,670	27.85	6,323,136	3.75	(1,253,958)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2048	0.0057	29	20,277,149	(285,151)	14,681,927	27.85	527,202	2.60	(239,078)
344 GENERATORS	06-2048	0.0016	(3)	48,074,379	8,684,299	40,832,312	29.76	1,372,247	2.85	(298,470)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2048	0.0013	(2)	33,771,053	6,357,742	28,088,732	29.90	939,569	2.78	(213,026)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2048	*0.0026*	(2)	1,777,365	269,117	1,543,795	29.29	52,706	2.97	(12,737)
TOTAL FT. MYERS UNIT 3				*297,029,843*	*17,134,949*	*281,854,608*	*28.28*	*9,965,943*	*3.36*	*(2,120,934)*
TOTAL FT. MYERS COMBINED CYCLE PLANT				***1,180,060,531***	***219,596,123***	***875,031,687***	***28.19***	***31,041,583***	***2.63***	***(22,394,380)***
MANATEE COMBINED CYCLE PLANT										
MANATEE UNIT 3										
341 STRUCTURES AND IMPROVEMENTS	06-2050	0.0023	(2)	31,908,336	11,618,676	20,927,827	31.29	668,935	2.10	(120,794)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2050	0.0095	(3)	4,421,337	1,641,048	2,912,929	27.48	105,991	2.40	(12,662)
343 PRIME MOVERS - GENERAL	06-2050	0.0057	(3)	285,009,855	45,627,280	247,932,871	29.49	8,407,443	2.95	(1,787,165)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2050	0.0057	35	189,328,023	17,972,043	105,091,172	29.49	3,563,658	1.88	(11,364,065)
344 GENERATORS	06-2050	0.0016	(3)	45,685,135	17,677,134	29,378,555	31.66	928,086	2.03	(211,501)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2050	0.0013	(2)	49,757,789	18,049,149	32,703,795	31.81	1,027,987	2.07	(260,071)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2050	*0.0026*	(2)	12,107,281	4,027,878	8,321,549	31.13	267,343	2.21	(78,093)
TOTAL MANATEE UNIT 3				*618,217,757*	*116,613,208*	*447,268,698*	*29.88*	*14,969,443*	*2.42*	*(13,834,351)*
TOTAL MANATEE COMBINED CYCLE PLANT				***618,217,757***	***116,613,208***	***447,268,698***	***29.88***	***14,969,443***	***2.42***	***(13,834,351)***

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
MARTIN COMBINED CYCLE PLANT										
MARTIN COMMON										
341 STRUCTURES AND IMPROVEMENTS	06-2039	0.0023	(2)	50,503,089	32,931,006	18,582,144	20.97	886,197	1.75	(267,973)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2039	0.0095	(3)	4,874,751	3,205,466	1,815,527	19.30	94,048	1.93	(24,692)
343 PRIME MOVERS - GENERAL	06-2039	0.0057	(3)	23,358,058	14,921,187	9,137,613	20.18	452,747	1.94	(144,093)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2039	0.0057	35	2,230,422	840,406	609,368	20.18	30,193	1.35	(77,279)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2039	0.0013	(2)	5,443,052	3,816,637	1,735,277	21.20	81,854	1.50	(18,651)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2039	*0.0026*	(2)	4,289,446	2,872,689	1,502,546	20.90	71,895	1.68	(28,610)
TOTAL MARTIN COMMON				*90,698,817*	*58,587,391*	*33,382,475*	*20.65*	*1,616,934*	*1.78*	*(561,298)*
MARTIN UNIT 3										
341 STRUCTURES AND IMPROVEMENTS	06-2039	0.0023	(2)	1,697,789	1,178,543	553,202	20.97	26,383	1.55	(8,020)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2039	0.0095	(3)	182,787	132,042	56,229	19.30	2,913	1.59	(803)
343 PRIME MOVERS - GENERAL	06-2039	0.0057	(3)	163,056,406	42,710,302	125,237,796	20.18	6,205,240	3.81	(1,990,951)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2039	0.0057	35	62,930,034	4,358,126	36,546,396	20.18	1,810,788	2.88	(3,188,719)
344 GENERATORS	06-2039	0.0016	(3)	27,182,223	13,254,957	14,742,733	21.13	697,709	2.57	(229,507)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2039	0.0013	(2)	29,087,069	17,237,157	12,431,653	21.20	586,412	2.02	(212,537)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2039	*0.0026*	(2)	582,526	419,938	174,238	14.85	11,733	2.01	0
TOTAL MARTIN UNIT 3				*284,718,832*	*79,291,064*	*189,742,247*	*20.31*	*9,341,178*	*3.28*	*(5,630,537)*
MARTIN UNIT 4										
341 STRUCTURES AND IMPROVEMENTS	06-2039	0.0023	(2)	1,532,781	823,761	739,676	20.97	35,276	2.30	(10,610)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2039	0.0095	(3)	182,371	131,656	56,186	19.30	2,911	1.60	(803)
343 PRIME MOVERS - GENERAL	06-2039	0.0057	(3)	169,519,058	64,561,904	110,042,726	20.18	5,452,360	3.22	(1,725,900)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2039	0.0057	35	95,841,805	13,436,230	48,860,943	20.18	2,420,945	2.53	(4,680,936)
344 GENERATORS	06-2039	0.0016	(3)	33,559,357	18,185,575	16,380,563	21.13	775,220	2.31	(255,652)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2039	0.0013	(2)	26,145,825	15,240,421	11,428,321	21.20	539,084	2.06	(194,912)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2039	*0.0026*	(2)	844,987	440,226	421,661	14.85	28,395	3.36	907
TOTAL MARTIN UNIT 4				*327,626,184*	*112,819,772*	*187,930,076*	*20.31*	*9,254,191*	*2.82*	*(6,867,906)*
MARTIN UNIT 8										
341 STRUCTURES AND IMPROVEMENTS	06-2050	0.0023	(2)	25,862,707	9,242,822	17,137,138	31.29	547,769	2.12	(99,160)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2050	0.0095	(3)	12,403,564	4,361,292	8,414,379	27.48	306,169	2.47	(37,275)
343 PRIME MOVERS - GENERAL	06-2050	0.0057	(3)	308,994,246	45,987,972	272,276,101	29.49	9,232,926	2.99	(1,944,254)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2050	0.0057	35	222,610,261	21,583,383	123,113,287	29.49	4,174,791	1.88	(13,590,474)
344 GENERATORS	06-2050	0.0016	(3)	44,713,507	14,666,541	31,388,372	31.66	991,577	2.22	(227,389)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2050	0.0013	(2)	56,238,775	19,041,202	38,322,349	31.81	1,204,596	2.14	(311,320)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2050	*0.0026*	(2)	5,333,644	1,899,934	3,540,383	31.13	113,740	2.13	(32,557)
TOTAL MARTIN UNIT 8				*676,156,704*	*116,783,146*	*494,192,009*	*29.82*	*16,571,568*	*2.45*	*(16,242,429)*
TOTAL MARTIN COMBINED CYCLE PLANT				***1,379,200,537***	***367,481,373***	***905,246,807***	***24.61***	***36,783,871***	***2.67***	***(29,302,170)***

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF

FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
SANFORD COMBINED CYCLE PLANT										
SANFORD COMMON										
341 STRUCTURES AND IMPROVEMENTS	06-2048	0.0023	(2)	73,652,636	31,568,527	43,557,162	29.43	1,480,015	2.01	(306,579)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2048	0.0095	(3)	91,441	45,565	48,619	26.08	1,864	2.04	(272)
343 PRIME MOVERS - GENERAL	06-2048	0.0057	(3)	6,103,661	(4,506,896)	10,793,667	27.85	387,581	6.35	(98,401)
344 GENERATORS	06-2048	0.0016	(3)	206,289	41,592	170,885	29.76	5,743	2.78	(1,275)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2048	0.0013	(2)	2,204,657	702,456	1,546,294	29.90	51,724	2.35	(16,185)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2048	*0.0026*	(2)	2,298,256	883,034	1,461,187	29.29	49,886	2.17	(15,229)
TOTAL SANFORD COMMON				*84,556,940*	*28,734,278*	*57,577,814*	*29.13*	*1,976,813*	*2.34*	*(437,941)*
SANFORD UNIT 4										
341 STRUCTURES AND IMPROVEMENTS	06-2048	0.0023	(2)	7,638,979	3,326,984	4,464,774	29.43	151,707	1.99	(32,712)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2048	0.0095	(3)	1,855,795	846,704	1,064,765	26.08	40,825	2.20	(5,834)
343 PRIME MOVERS - GENERAL	06-2048	0.0057	(3)	215,835,490	32,420,005	189,890,549	27.85	6,818,629	3.16	(1,565,060)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2048	0.0057	35	183,294,116	13,739,689	105,401,487	27.85	3,784,778	2.06	(11,102,438)
344 GENERATORS	06-2048	0.0016	(3)	33,768,065	11,149,618	23,631,489	29.76	794,181	2.35	(193,345)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2048	0.0013	(2)	36,216,823	15,889,430	21,051,730	29.90	704,181	1.94	(207,149)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2048	*0.0026*	(2)	3,422,702	1,509,042	1,982,114	29.29	67,670	1.98	(21,334)
TOTAL SANFORD UNIT 4				*482,031,970*	*78,881,472*	*347,486,908*	*28.11*	*12,361,971*	*2.56*	*(13,127,872)*
SANFORD UNIT 5										
341 STRUCTURES AND IMPROVEMENTS	06-2047	0.0023	(2)	7,486,029	3,347,396	4,288,353	28.50	150,473	2.01	(32,868)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2047	0.0095	(3)	1,867,173	917,504	1,005,685	25.37	39,646	2.12	(6,150)
343 PRIME MOVERS - GENERAL	06-2047	0.0057	(3)	233,978,163	25,427,830	215,569,678	27.02	7,978,215	3.41	(1,878,652)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2047	0.0057	35	169,584,346	8,563,875	101,665,950	27.02	3,762,648	2.22	(10,436,507)
344 GENERATORS	06-2047	0.0016	(3)	33,575,007	12,550,119	22,032,138	28.80	764,904	2.28	(191,352)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2047	0.0013	(2)	35,686,945	15,778,237	20,622,447	28.93	712,733	2.00	(210,798)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2047	*0.0026*	(2)	2,983,622	1,325,321	1,717,974	28.37	60,559	2.03	(19,235)
TOTAL SANFORD UNIT 5				*485,161,285*	*67,910,281*	*366,902,225*	*27.24*	*13,469,178*	*2.78*	*(12,775,562)*
TOTAL SANFORD COMBINED CYCLE PLANT				***1,051,750,194***	***175,526,030***	***771,966,947***	***27.76***	***27,807,962***	***2.64***	***(26,341,375)***
TURKEY POINT COMBINED CYCLE PLANT										
TURKEY POINT UNIT 5										
341 STRUCTURES AND IMPROVEMENTS	06-2047	0.0023	(2)	34,496,253	11,955,973	23,230,204	33.13	701,158	2.03	(118,250)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2047	0.0095	(3)	13,269,835	4,563,334	9,104,596	28.85	315,624	2.38	(31,615)
343 PRIME MOVERS - GENERAL	06-2047	0.0057	(3)	278,605,458	45,475,533	241,488,089	31.11	7,762,946	2.79	(1,582,568)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2047	0.0057	35	187,989,955	16,186,258	106,007,213	31.11	3,407,739	1.81	(10,917,560)
344 GENERATORS	06-2047	0.0016	(3)	44,556,175	12,477,414	33,415,447	33.55	996,055	2.24	(215,088)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2047	0.0013	(2)	55,581,392	18,204,940	38,488,080	33.73	1,141,188	2.05	(276,943)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2047	*0.0026*	(2)	13,295,149	4,022,433	9,538,618	32.95	289,464	2.18	(81,112)
TOTAL TURKEY POINT UNIT 5				*627,794,217*	*112,885,885*	*461,272,247*	*31.56*	*14,614,174*	*2.33*	*(13,223,136)*
TOTAL TURKEY POINT COMBINED CYCLE PLANT				***627,794,217***	***112,885,885***	***461,272,247***	***31.56***	***14,614,174***	***2.33***	***(13,223,136)***

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF

FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE
ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
WEST COUNTY COMBINED CYCLE PLANT										
WEST COUNTY COMMON										0
341 STRUCTURES AND IMPROVEMENTS	06-2056	0.0023	(2)	3,122,753	575,485	2,609,722	36.80	70,925	2.27	(10,198)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2056	0.0095	(3)	450,887	81,427	382,986	31.46	12,174	2.70	(769)
343 PRIME MOVERS - GENERAL	06-2056	0.0057	(3)	31,305,861	2,151,114	30,093,922	34.28	877,999	2.80	(145,952)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2056	0.0057	35	126,771,982	16,665,363	65,736,425	34.28	1,917,879	1.51	(7,622,966)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2056	0.0013	(2)	1,292,151	145,622	1,172,372	37.54	31,233	2.42	(6,379)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2056	*0.0026*	(2)	837,057	136,433	717,365	36.57	19,615	2.34	(4,802)
TOTAL WEST COUNTY COMMON				*163,780,690*	*19,755,445*	*100,712,792*	*34.38*	*2,929,825*	*1.79*	*(7,791,066)*
WEST COUNTY UNIT 1										
341 STRUCTURES AND IMPROVEMENTS	06-2054	0.0023	(2)	109,904,546	23,177,167	88,925,470	34.97	2,543,059	2.31	(397,598)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2054	0.0095	(3)	21,820,106	3,351,289	19,123,421	30.17	633,817	2.90	(51,610)
343 PRIME MOVERS - GENERAL	06-2054	0.0057	(3)	302,831,799	(12,320,142)	324,236,895	32.70	9,914,565	3.27	(1,918,898)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2054	0.0057	35	81,978,671	(3,932,250)	57,218,386	32.70	1,749,633	2.13	(7,931,989)
344 GENERATORS	06-2054	0.0016	(3)	49,500,092	9,281,826	41,703,269	35.43	1,176,921	2.38	(242,040)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2054	0.0013	(2)	72,345,306	14,355,541	59,436,671	35.63	1,667,975	2.31	(389,369)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2054	*0.0026*	(2)	8,047,119	1,572,875	6,635,186	34.77	190,841	2.37	(52,028)
TOTAL WEST COUNTY UNIT 1				*646,427,639*	*35,486,306*	*597,279,298*	*33.41*	*17,876,811*	*2.77*	*(10,983,532)*
WEST COUNTY UNIT 2										
341 STRUCTURES AND IMPROVEMENTS	06-2054	0.0023	(2)	39,684,489	7,347,094	33,131,085	34.97	947,471	2.39	(148,134)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2054	0.0095	(3)	7,476,137	504,446	7,195,975	30.17	238,500	3.19	(18,683)
343 PRIME MOVERS - GENERAL	06-2054	0.0057	(3)	257,772,576	25,698,199	239,807,554	32.70	7,332,872	2.84	(1,422,424)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2054	0.0057	35	149,902,839	17,807,451	79,629,394	32.70	2,434,920	1.62	(11,200,250)
344 GENERATORS	06-2054	0.0016	(3)	43,626,334	7,941,202	36,993,922	35.43	1,044,017	2.39	(214,280)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2054	0.0013	(2)	33,197,918	6,310,127	27,551,750	35.63	773,186	2.33	(180,492)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2054	*0.0026*	(2)	11,900,801	2,070,825	10,067,993	34.77	289,576	2.43	(76,400)
TOTAL WEST COUNTY UNIT 2				*543,561,094*	*67,679,344*	*434,377,673*	*33.26*	*13,060,542*	*2.40*	*(13,260,663)*
WEST COUNTY UNIT 3										
341 STRUCTURES AND IMPROVEMENTS	06-2056	0.0023	(2)	58,787,838	10,329,483	49,634,112	36.80	1,348,921	2.29	(195,869)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2056	0.0095	(3)	10,963,087	1,082,170	10,209,810	31.46	324,540	2.96	(20,037)
343 PRIME MOVERS - GENERAL	06-2056	0.0057	(3)	506,388,398	29,212,173	492,367,877	34.28	14,364,973	2.84	(2,619,086)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2056	0.0057	35	84,037,288	4,966,776	49,657,461	34.28	1,448,771	1.72	(5,747,962)
344 GENERATORS	06-2056	0.0016	(3)	65,774,579	11,214,181	56,533,635	37.31	1,515,070	2.30	(294,006)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2056	0.0013	(2)	49,186,847	8,844,925	41,325,659	37.54	1,100,945	2.24	(242,979)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2056	*0.0026*	(2)	12,695,602	8,125,669	4,823,845	36.57	131,896	1.04	(33,872)
TOTAL WEST COUNTY UNIT 3				*787,833,639*	*73,775,378*	*704,552,399*	*34.82*	*20,235,116*	*2.57*	*(9,153,811)*
TOTAL WEST COUNTY COMBINED CYCLE PLANT				***2,141,603,062***	***196,696,472***	***1,836,922,162***	***33.95***	***54,102,294***	***2.53***	***(41,189,072)***
CAPE CANAVERAL COMBINED CYCLE PLANT										
CAPE CANAVERAL COMBINED CYCLE										
341 STRUCTURES AND IMPROVEMENTS	06-2058	0.0023	(2)	84,193,535	9,244,880	76,632,525	38.61	1,984,594	2.36	(266,655)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2058	0.0095	(3)	48,944,925	5,183,870	45,229,403	32.71	1,382,790	2.83	(61,316)
343 PRIME MOVERS - GENERAL	06-2058	0.0057	(3)	400,913,908	38,175,124	374,766,201	35.83	10,460,941	2.61	(1,790,324)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2058	0.0057	35	229,372,194	25,648,251	123,443,675	35.83	3,445,713	1.50	(13,510,836)
344 GENERATORS	06-2058	0.0016	(3)	72,067,370	7,623,245	66,606,146	39.19	1,699,665	2.36	(311,998)

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	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
345 ACCESSORY ELECTRIC EQUIPMENT	06-2058	0.0013	(2)	114,551,905	12,158,693	104,684,250	39.43	2,654,681	2.32	(550,593)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2058	*0.0026*	(2)	10,573,301	1,080,694	9,704,073	38.37	252,923	2.39	(60,719)
TOTAL CAPE CANAVERAL COMBINED CYCLE				*960,617,138*	*99,114,757*	*801,066,273*	*36.61*	*21,881,307*	*2.28*	*(16,552,441)*
TOTAL CAPE CANAVERAL COMBINED CYCLE PLANT				***960,617,138***	***99,114,757***	***801,066,273***	***36.61***	***21,881,307***	***2.28***	***(16,552,441)***

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FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
RIVIERA COMBINED CYCLE PLANT										
RIVIERA COMBINED CYCLE										
341 STRUCTURES AND IMPROVEMENTS	06-2059	0.0023	(2)	81,600,591	10,055,516	73,177,086	39.52	1,851,674	2.27	(242,690)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2059	0.0095	(3)	219,919,231	25,605,492	200,911,315	33.32	6,029,876	2.74	(215,424)
343 PRIME MOVERS - GENERAL	06-2059	0.0057	(3)	533,780,144	51,780,097	498,013,451	36.59	13,610,053	2.55	(2,255,301)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2059	0.0057	35	139,524,961	21,969,265	68,721,960	36.59	1,878,081	1.35	(7,773,880)
344 GENERATORS	06-2059	0.0016	(3)	80,939,003	8,455,775	74,911,398	40.12	1,867,081	2.31	(334,253)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2059	0.0013	(2)	83,796,292	9,527,698	75,944,520	40.38	1,880,721	2.24	(382,227)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2059	*0.0026*	(2)	11,584,212	2,033,993	9,781,904	39.26	249,150	2.15	(57,878)
TOTAL RIVIERA COMBINED CYCLE				*1,151,144,433*	*129,427,836*	*1,001,461,634*	*36.59*	*27,366,636*	*2.38*	*(11,261,653)*
TOTAL RIVIERA COMBINED CYCLE PLANT				***1,151,144,433***	***129,427,836***	***1,001,461,634***	***36.59***	***27,366,636***	***2.38***	***(11,261,653)***
PT EVERGLADES COMBINED CYCLE PLANT										
PT EVERGLADES COMBINED CYCLE										
341 STRUCTURES AND IMPROVEMENTS	06-2061	0.0023	(2)	101,725,228	5,413,540	98,346,192	41.32	2,379,886	2.34	(286,768)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2061	0.0095	(3)	59,665,117	3,175,215	58,279,855	34.51	1,688,693	2.83	(30,984)
343 PRIME MOVERS - GENERAL	06-2061	0.0057	(3)	518,622,217	21,854,511	512,326,373	38.11	13,444,385	2.59	(2,066,556)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2061	0.0057	35	191,363,196	15,928,984	108,457,093	38.11	2,846,113	1.49	(10,694,098)
344 GENERATORS	06-2061	0.0016	(3)	87,208,139	4,640,980	85,183,403	41.99	2,028,843	2.33	(343,954)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2061	0.0013	(2)	138,483,956	7,369,740	133,883,895	42.27	3,167,347	2.29	(608,285)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2061	*0.0026*	(2)	12,795,087	680,920	12,370,069	41.04	301,414	2.36	(65,215)
TOTAL PT EVERGLADES COMBINED CYCLE				*1,109,862,940*	*59,063,890*	*1,008,846,880*	*39.02*	*25,856,681*	*2.33*	*(14,095,860)*
TOTAL PT EVERGLADES COMBINED CYCLE PLANT				***1,109,862,940***	***59,063,890***	***1,008,846,880***	***39.02***	***25,856,681***	***2.33***	***(14,095,860)***
TOTAL COMBINED CYCLE PRODUCTION PLANT				**10,884,506,011**	**1,766,287,393**	**8,453,611,727**	***31.07***	**272,118,295**	***2.50***	**(199,238,526)**
PEAKER PLANTS										
LAUDERDALE GTS										
341 STRUCTURES AND IMPROVEMENTS	06-2028	0.0023	(2)	601,222	330,322	282,924	10.37	27,274	4.54	(194)
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2028	0.0095	(3)	194,417	102,093	98,157	9.98	9,839	5.06	(177)
343 PRIME MOVERS - GENERAL	06-2028	0.0057	(3)	14,841,925	2,188,184	13,098,999	10.19	1,286,007	8.66	(5,807)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2028	0.0057	29	1,858,779	571,426	748,307	10.19	73,466	3.95	(24,995)
344 GENERATORS	06-2028	0.0016	(3)	1,748,135	750,005	1,050,575	10.41	100,902	5.77	(7,071)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2028	0.0013	(2)	420,107	174,657	253,852	10.43	24,343	5.79	(3,190)
346 MISCELLANEOUS POWER PLANT EQUIP	06-2028	*0.0026*	(2)	20,935	8,570	12,784	10.50	1,218	5.82	(191)
TOTAL LAUDERDALE GTS				*19,685,520*	*4,125,255*	*15,545,598*	***10.21***	*1,523,049*	***7.74***	*(41,625)*
FT. MYERS GTS										
341 STRUCTURES AND IMPROVEMENTS	06-2028	0.0023	(2)	941,093	199,921	759,993	10.37	73,265	7.79	118
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2028	0.0095	(3)	724,318	139,689	606,358	9.98	60,780	8.39	922
343 PRIME MOVERS - GENERAL	06-2028	0.0057	(3)	10,218,903	1,769,584	8,755,886	10.19	859,618	8.41	(3,882)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2028	0.0057	29	2,807,095	1,209,852	783,185	10.19	76,890	2.74	(60,030)
344 GENERATORS	06-2028	0.0016	(3)	4,602,022	652,683	4,087,400	10.41	392,574	8.53	(4,261)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2028	0.0013	(2)	3,450,438	576,560	2,942,886	10.43	282,201	8.18	(2,411)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2028	*0.0026*	(2)	20,936	3,117	18,238	10.50	1,737	8.30	(56)

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF

FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE
ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
TOTAL FT. MYERS GTS				*22,764,804*	*4,551,406*	*17,953,946*	***10.28***	*1,747,065*	***7.67***	*(69,600)*
LAUDERDALE AND FT. MYERS PEAKERS										
341 STRUCTURES AND IMPROVEMENTS	06-2056	0.0023	(2)	43,805,886	1,507,492	43,174,512	36.80	1,173,367	2.68	2,692
342 FUEL HOLDERS, PRODUCERS & ACCESS.	06-2056	0.0095	(3)	26,150,085	899,903	26,034,684	31.46	827,567	3.16	59,356
343 PRIME MOVERS - GENERAL	06-2056	0.0057	(3)	226,797,342	8,026,196	225,575,066	34.28	6,581,217	2.90	(248,183)
343.2 PRIME MOVERS - CAPITAL SPARE PARTS	06-2056	0.0057	29	83,870,827	2,664,827	56,883,460	34.28	1,659,591	1.98	(752,769)
344 GENERATORS	06-2056	0.0016	(3)	38,221,667	1,315,322	38,052,994	37.31	1,019,799	2.67	(40,173)
345 ACCESSORY ELECTRIC EQUIPMENT	06-2056	0.0013	(2)	60,694,881	2,088,693	59,820,085	37.54	1,593,650	2.63	(93,324)
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2056	*0.0026*	(2)	5,607,843	192,983	5,527,017	36.57	151,123	2.69	(12,689)
TOTAL LAUDERDALE AND FT. MYERS PEAKERS				*485,148,530*	*16,695,416*	*455,067,818*	***34.99***	*13,006,314*	***2.68***	*(1,085,090)*
TOTAL PEAKER PLANTS				**527,598,853**	**25,372,077**	**488,567,362**	***30.02***	**16,276,428**	***3.09***	**(1,196,315)**

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF

FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
SOLAR PRODUCTION PLANT										
DESOTO SOLAR										
341 STRUCTURES AND IMPROVEMENTS	06-2039	SQUARE *	0	4,651,944	1,140,422	3,511,522	21.52	163,175	3.51	0
343 PRIME MOVERS - GENERAL	06-2039	SQUARE *	0	119,117,666	32,672,681	86,444,986	21.52	4,016,960	3.37	0
345 ACCESSORY ELECTRIC EQUIPMENT	06-2039	SQUARE *	0	27,632,355	5,776,623	21,855,732	21.52	1,015,601	3.68	0
TOTAL DESOTOSOLAR				*151,401,966*	*39,589,726*	*111,812,240*	*21.52*	*5,195,736*	*3.43*	-
SPACE COAST SOLAR										
341 STRUCTURES AND IMPROVEMENTS	06-2040	SQUARE *	0	3,995,821	877,823	3,117,998	22.52	138,455	3.46	0
343 PRIME MOVERS - GENERAL	06-2040	SQUARE *	0	52,975,942	13,541,799	39,434,143	22.52	1,751,072	3.31	0
345 ACCESSORY ELECTRIC EQUIPMENT	06-2040	SQUARE *	0	6,295,429	1,295,516	4,999,912	22.52	222,021	3.53	0
TOTAL SPACE COAST SOLAR				*63,267,191*	*15,715,138*	*47,552,053*	*22.52*	*2,111,548*	*3.34*	-
MARTIN SOLAR										
341 STRUCTURES AND IMPROVEMENTS	06-2045	SQUARE *	0	21,390,960	3,831,143	17,559,817	27.48	639,004	2.99	0
343 PRIME MOVERS - GENERAL	06-2045	SQUARE *	0	407,102,089	85,750,895	321,351,194	27.47	11,698,260	2.87	0
345 ACCESSORY ELECTRIC EQUIPMENT	06-2045	SQUARE *		4,253,317	765,960	3,487,358	27.47	126,952	2.98	0
346 MISCELLANEOUS POWER PLANT EQUIP.	06-2045	SQUARE *	0	1,340	299	1,041	27.48	38	2.84	0
TOTAL MARTIN SOLAR				*432,747,706*	*90,348,296*	*342,399,410*	*27.47*	*12,464,254*	*2.88*	-
BABCOCK RANCH SOLAR										
341 STRUCTURES AND IMPROVEMENTS	06-2046	SQUARE *	0	4,078,184	151,547	3,926,637	28.53	137,632	3.37	0
343 PRIME MOVERS - GENERAL	06-2046	SQUARE *	0	104,431,380	3,880,707	100,550,673	28.53	3,524,384	3.37	0
345 ACCESSORY ELECTRIC EQUIPMENT	06-2046	SQUARE *	0	24,224,241	900,181	23,324,060	28.53	817,528	3.37	0
TOTAL BABCOCK RANCH SOLAR				*132,733,805*	*4,932,435*	*127,801,370*	*28.53*	*4,479,544*	*3.37*	-
MANATEE SOLAR										
341 STRUCTURES AND IMPROVEMENTS	06-2046	SQUARE *	0	4,118,679	142,042	3,976,637	28.53	139,384	3.38	0
343 PRIME MOVERS - GENERAL	06-2046	SQUARE *	0	105,468,354	3,637,318	101,831,036	28.53	3,569,262	3.38	0
345 ACCESSORY ELECTRIC EQUIPMENT	06-2046	SQUARE *	0	24,464,781	843,724	23,621,057	28.53	827,938	3.38	0
TOTAL MANATEE SOLAR				*134,051,814*	*4,623,085*	*129,428,730*	*28.53*	*4,536,584*	*3.38*	-
CITRUS SOLAR										
341 STRUCTURES AND IMPROVEMENTS	06-2046	SQUARE *	0	4,207,181	156,214	4,050,967	28.53	141,990	3.37	0
343 PRIME MOVERS - GENERAL	06-2046	SQUARE *	0	107,734,657	4,000,215	103,734,442	28.53	3,635,978	3.37	0
345 ACCESSORY ELECTRIC EQUIPMENT	06-2046	SQUARE *	0	24,990,480	927,903	24,062,577	28.53	843,413	3.37	0
TOTAL CITRUS SOLAR				*136,932,317*	*5,084,331*	*131,847,986*	*28.53*	*4,621,381*	*3.37*	-
TOTAL SOLAR PRODUCTION PLANT				**1,051,134,801**	**160,293,011**	**890,841,789**	***26.66***	**33,409,047**	***3.18***	**-**
TOTAL PRODUCTION PLANT				**23,528,808,008**	**5,984,853,375**	**17,028,858,906**	***22.48***	**757,612,879**	***3.22***	**(212,466,373)**

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF

FLORIDA POWER AND LIGHT COMPANY'S

ESTIMATED SURVIVOR CURVE, NET SALVAGE, ORIGINAL COST, BOOK RESERVE AND CALCULATED REMAINING LIFE
ANNUAL DEPRECIATION ACCRUALS AND RATES RELATED TO ELECTRIC PLANT IN SERVICE AS OF DECEMBER 31, 2017

	Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
	(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $
TRANSMISSION, DISTRIBUTION, AND GENERAL PLANT										
TRANSMISSION PLANT										
350.2 EASEMENTS		100R4	0	256,062,201	53,654,850	202,407,351	78.56	2,576,468	1.01	(646,337)
352 STRUCTURES AND IMPROVEMENTS		65R3	(15)	164,509,019	42,940,286	146,245,086	52.30	2,796,273	1.70	0
353 STATION EQUIPMENT		44L1	0	1,836,156,315	471,438,144	1,364,718,172	34.67	39,363,085	2.14	(4,022,131)
353.1 STATION EQUIP- STEP-UP TRANSFRMRS		38R1	0	416,112,313	41,611,558	374,500,755	31.38	11,934,377	2.87	(2,796,798)
354 TOWERS AND FIXTURES		70R4	(15)	371,412,402	174,745,060	252,379,203	46.24	5,458,028	1.47	(886,222)
355 POLES AND FIXTURES		55S0	(40)	1,315,959,901	298,111,651	1,544,232,210	45.74	33,761,089	2.57	(4,604,658)
356 OVERHEAD CONDUCTORS AND DEVICES		55S0	(45)	905,131,018	337,007,405	975,432,572	43.10	22,631,846	2.50	(3,100,558)
357 UNDERGROUND CONDUIT		65R4	0	80,295,444	27,751,732	52,543,713	45.61	1,152,022	1.43	0
358 UNDERGROUND CONDUCTORS & DEVICES		65R3	(20)	111,203,910	31,010,193	102,434,500	49.36	2,075,253	1.87	0
359 ROADS AND TRAILS		75R4	(10)	120,783,299	44,431,827	88,429,802	54.85	1,612,212	1.33	0
TOTAL TRANSMISSION PLANT				**5,577,625,822**	**1,522,702,705**	**5,103,323,364**	***41.37***	**123,360,653**	***2.21***	**(16,056,704)**
DISTRIBUTION PLANT										
361 STRUCTURES AND IMPROVEMENTS		65R3	(15)	205,508,713	58,619,128	177,715,892	49.52	3,588,770	1.75	0
362 STATION EQUIPMENT		48S0.5	(5)	1,911,232,119	532,515,752	1,474,277,973	36.65	40,225,866	2.10	(4,910,340)
364.1 POLES, TOWERS AND FIXTURES - WOOD		44R2.5	(60)	1,152,547,582	390,862,586	1,453,213,546	32.14	45,215,107	3.92	(16,804,518)
364.2 POLES, TOWERS & FIXTURES - CONCRETE		56S0	(60)	931,675,388	85,838,156	1,404,842,464	51.88	27,078,691	2.91	(10,828,936)
365 OVERHEAD CONDUCTORS & DEVICES		53R1	(60)	2,233,914,472	680,045,642	2,894,217,512	44.16	65,539,346	2.93	(16,500,740)
366.6 UNDERGROUND CONDUIT - DUCT SYSTEM		70R3	0	1,527,417,261	361,940,007	1,165,477,254	53.67	21,715,619	1.42	0
366.7 UNDERGROUND CONDUIT - DIRECT BURIEI		50R4	0	287,479,644	31,128,709	256,350,934	44.49	5,761,990	2.00	0
367.6 UG CONDUCTORS & DEVICES-DUCT SYS		46L0.5	0	1,707,263,747	402,530,945	1,304,732,802	36.41	35,834,463	2.10	(5,833,924)
367.7 UG CONDUCTORS & DEVICES-DIRECT BUR		45L1	0	936,987,534	234,429,172	702,558,362	36.51	19,242,902	2.05	(5,782,442)
368 LINE TRANSFORMERS		34S0	(15)	2,222,715,383	1,015,547,476	1,540,575,215	23.37	65,921,062	2.97	0
369.1 SERVICES - OVERHEAD		53R1	(85)	583,179,472	110,659,981	968,222,043	47.09	20,561,097	3.53	(4,489,866)
369.6 SERVICES - UNDERGROUND		45R2	(15)	815,647,717	334,839,861	603,155,013	30.98	19,469,174	2.39	0
370 METERS		38R2	(20)	90,547,258	62,047,824	46,608,885	16.58	2,811,151	3.10	(283,889)
370.1 METERS - AMI		20R2.5	(20)	840,946,338	218,183,706	790,951,900	15.29	51,730,013	6.15	(4,400,593)
371 INSTALLATIONS ON CUSTOMERS' PREMISE		30L0	(15)	82,197,777	34,707,239	59,820,205	22.07	2,710,476	3.30	0
373 STREET LIGHTING AND SIGNAL SYSTEMS		39L0	(15)	486,691,168	176,319,676	383,375,167	31.25	12,268,005	2.52	(1,415,926)
TOTAL DISTRIBUTION PLANT				**16,015,951,572**	**4,730,215,860**	**15,226,095,167**	***34.63***	**439,673,732**	***2.75***	**(71,251,174)**
GENERAL PLANT										
390 STRUCTURES AND IMPROVEMENTS		55R1.5	10	498,029,543	106,316,073	341,910,515	42.31	8,081,080	1.62	(1,819,799)
392.1 AUTOMOBILES		6L2.5	15	9,553,998	2,860,935	5,259,963	3.56	1,477,518	15.46	0
392.2 LIGHT TRUCKS		9L3	15	49,640,483	14,686,875	27,507,536	5.53	4,974,238	10.02	0
392.3 HEAVY TRUCKS		13S3	15	258,262,874	105,081,526	114,441,917	7.85	14,578,588	5.64	(1,108,792)
392.4 TRACTOR TRAILERS		9L2.5	5	823,115	702,529	79,431	4.46	17,810	2.16	0
392.9 TRAILERS		20L1	15	22,842,251	3,130,953	16,284,960	14.45	1,126,987	4.93	0
396.1 POWER OPERATED EQUIPMENT		11L1.5	15	5,278,055	2,463,918	2,022,429	5.98	338,199	6.41	0
397.8 COMMUNICATION EQUIP - FIBER OPTICS		20S2	0	13,578,642	10,380,859	3,197,783	11.50	278,068	2.05	0
TOTAL GENERAL PLANT				**858,008,962**	**245,623,669**	**510,704,534**	***16.54***	**30,872,488**	***3.60***	**(2,928,591)**
TOTAL TRANSMISSION, DISTRIBUTION AND GENERAL PLANT				**22,451,586,356**	**6,498,542,234**	**20,840,123,065**	***35.09***	**593,906,873**	***2.65***	**(90,236,469)**
GRAND TOTAL				**45,980,394,364**	**12,483,395,608**	**37,868,981,971**	***28.02***	**1,351,519,752**	***2.94***	**(302,702,842)**

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FLORIDA POWER AND LIGHT COMPANY'S

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Probable Retirement Date	Interim Retirement Rate/Curve	Net Salvage	Original Cost	Book Reserve	Future Accruals	Composite Remaining Life	Annual Depreciation Accruals	Annual Depreciation Rate	Annual Adjustment
(1)	(2)	(3)	(4)	(5)	(6)=(100%-(3))x(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(4)	(10)=(4)-FPL $

Column (1) : Exhibit NWA-1 pages 54-64 with 5-year extension for Combined Cycle units
Column (2) : Commission adopted interim retirement rates in prior case and Exhibit NWA-1 page 65 except as adjusted by OPC.
Column (3) : Exhibit NWA-1 pages 54-65 except as adjusted by OPC.
Column (4) : Exhibit NWA-1 pages 54-65.
Column (5) : Exhibit NWA-1 pages 54-65 except as adjusted by OPC to remove $923,126,674 relating to four-year amortization of a portion of mass property surplus reserve

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Direct Testimony Supporting Documents and Workpapers

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